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IN THE

Supreme Court of the United States

AT&T CORP., *et al.*,

Petitioners,

v.

UNITED STATES TELECOM ASSOCIATION, *et al.*,

Respondents.

Petition for a Writ of Certiorari to the United States Court of Appeals for the District of Columbia Circuit Circuit

PETITION FOR A WRIT OF CERTIORARI APPENDIX—VOLUME TWO

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472. In making our national finding of impairment due to the incumbent LEC hot cut process, we do not rely on the results of the cost studies and business case analyses some commenters submitted concerning the economic feasibility of competitive entry into the mass market without access to unbundled switching. Specifically, BellSouth and SBC presented studies in support of their claim that economic entry by competitive LECs was possible using UNE-L without unbundled switching, at least in wire centers with 5,000 lines or more.[1455] AT&T and WorldCom claimed that competitive LECs were impaired without unbundled switching based on studies estimating the cost disadvantage relative to the incumbent LEC experienced by competitive LECs serving customers using UNE-L, although WorldCom's study suggested that it may be possible to alleviate the impairment in the largest wire centers.[1456] These studies are discussed in detail below.[1457] We find that technical shortcomings in each of these studies preclude us from relying on their results to evaluate impairment at the national level.[1458] These shortcomings include: (1) failure to use the proper framework when determining impairment;[1459] (2) insufficient granularity in their analyses;[1460] (3) failure to consider the typical revenues gained from serving the average

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[1455] *See generally* Letter from Glenn T. Reynolds, Vice President—Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC (filed Jan. 30, 2003) (BellSouth Jan. 30, 2003 *Ex Parte* Letter); SBC Jan. 14, 2003 *Ex Parte* Letter.

[1456] *See generally* AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 *Ex Parte* Letter.

[1457] *See infra* Part VI.D.6.a.(i).

[1458] *See supra* para. 178 (discussing the shortcomings of the studies).

[1459] The AT&T and WorldCom studies do not consider the potential revenues available to an entrant.

[1460] All of the studies rely on averages, and fail to provide geographically disaggregated results.

customer in the market; and (4) inadequate support for the parameters they employed. Each study's particular inputs and assumptions heavily influenced its results, and there was significant disagreement in the record about the proper inputs and assumptions.[1461] Although we are not able to rely on the results of these studies with respect to our national finding of impairment, the studies do highlight various factors which should be evaluated by the states on a market-specific basis as part of their impairment analyses, as discussed in greater detail below.[1462]

473. Our national finding of impairment is based on the combined effect of all aspects of the hot cut process on competitors' ability to serve mass market voice customers. Thus, while many of the factors discussed above may vary from location to location, such as hot cut NRCs,[1463] we find the overall impact of the current hot cut process raises competitors' costs, lowers their quality of service, and delays the provisioning of service, thereby preventing them from serving the mass market in the large majority of locations. However, observed variations in these factors suggest that requesting carriers may not be impaired without access to

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[1461] For example, the commenters disagree about what revenues to use when calculating net profits, and use different estimates regarding the size of the wire center and where it is located, the competing carrier's predicted market share, the cost of inputs such as transport and collocation, the estimated revenue, and whether the competing carrier had existing facilities. *See* AT&T Jan. 17, 2003 *Ex Parte* Letter at 3; WorldCom Jan. 8, 2003 *Ex Parte* Letter at Attach. A, 3-6; SBC Jan. 14, 2003 *Ex Parte* Letter at 3; BellSouth Jan. 30, 2003 *Ex Parte* Letter at 2-8, Attach. at 4, 7-9.

[1462] *See infra* Part VI.D.6.a.(i) (discussing other factors which potentially could cause impairment, but for which the present record does not warrant a national finding of impairment).

[1463] According to one commenter, non-recurring charges for hot cuts can vary from $2 (in Minnesota) to $117 (in Oregon). WorldCom Feb. 12, 2003 *Ex Parte* Letter at 2.

unbundled switching in some particular instances, but evidence in the record is not sufficiently detailed to identify these specific markets. Therefore, as described in detail below, we ask the states to identify where competing carriers are not impaired without unbundled switching, pursuant to the triggers and analysis of competitors' potential to deploy.

474. The record evidence strongly suggests that the hot cut process could be improved if cut overs were done on a bulk basis, such that the timing and volume of the cut over is better managed.[1464] We expect that such improvements would result in some reduction of the non-recurring costs that, according to competitive carriers, prevent entry. Indeed, at this time, we find such improvements are likely to be essential to overcome the operational impairment that competitors face in serving mass market customers.[1465] Without such improvement, the record shows that carriers are likely to be unable to economically serve a market characterized by low margins. Incumbent LECs argue that Frame Due Time (FDT) and project managed approaches offer sufficient efficiency. With FDT cut overs, both the incumbent and the competing carrier perform necessary work at pre-arranged times, with no communication required at the time of the hot cut. Project managed cut overs involve the conversion of a number of lines at one time, pursuant to provisioning requirements and

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[1464] Verizon states that it can efficiently manage the conversion of the anticipated hot cut volumes associated with the embedded base on a negotiated project managed basis, as it has done with carriers like AT&T and Broadview. *See* Verizon Dec. 23, 2002 Hot Cut *Ex Parte* Letter at 2, 5-6. We note, however, that there is no completion interval associated with such conversions, and that Verizon therefore is not subject to penalties for inadequate performance.

[1465] We recognize that any such "operational" impairment would result in a disparity between an incumbent's cost to serve a customer and a new entrant's cost to serve a customer. We will treat any such cost disparity separately from other economic issues because it is tied closely to the hot cut process, which is uniquely within the control of the incumbent LEC.

intervals negotiated by the incumbent and the competitive LEC. We find that these approaches are not sufficiently developed or widespread enough to adequately address the impairment created by the loop cut over process. The evidence in the record demonstrates that the carriers that have used project-managed cut overs have used them only for business customers,[1466] and only after acquiring the customer through a means that offered the use of incumbent LEC loops and switches in combination.[1467] Further, competitive carriers rarely know in advance the precise locations of new mass market customers, and the facilities used to serve them, hindering the use of project managed processes, which must be negotiated well in advance of customer conversion.[1468] In addition, the FDT and project managed approaches do not offer rates (*i.e.*, volume discounts) that reflect efficiencies to these approaches. Finally, because there generally are no performance intervals associated with these approaches, incumbent LECs are not subject to financial penalties for inadequate performance.

475. Accordingly, we conclude that the operational and economic barriers arising from the hot cut process create an

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[1466] *See* Letter from Rebecca Sommi, Vice President—Operations, Broadview Networks *et al.*, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 at 6 (filed Jan. 15, 2003) (Broadview *et al.* Jan. 15, 2003 *Ex Parte* Letter) (asserting that the project managed hot cuts had been primarily used with small business customers as opposed to mass market customers); BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 11 (asserting that the project managed hot cuts were mostly used for business customers). Broadview states that the Commission should accord no credibility to Verizon's claim that it can handle hot cuts on a project-managed basis as well as it handles hot cuts on an order-by-order basis, given the fact that Verizon has failed to provide the data that indicate that the quality of the hot cut is not impacted when managed as a project. Broadview *et al.* Jan. 15, 2003 *Ex Parte* Letter at 6.

[1467] AT&T Brenner Decl. at 44-55; Broadview *et al.* Jan. 15, 2003 *Ex Parte* Letter at 6; BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 11.

[1468] BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 11.

insurmountable disadvantage to carriers seeking to serve the mass market, demonstrating that competitive carriers are impaired without local circuit switching as a UNE. Although we find that current conditions at the national level demonstrate that competitive LECs are impaired without unbundled switching for mass market customers based on the costs and delays associated with hot cuts, we take affirmative steps to reduce this impairment and promote an environment suitable for increased facilities-based competition. As described below, we find that the present impairment can be mitigated by an improved loop provisioning process.

(i) Other Operational and Economic Impairment

476. Above we have concluded that economic and operational barriers associated with the hot cut process justify a national finding that requesting carriers are impaired without access to unbundled local circuit switching. We have, however, asked states to identify markets in which requesting carriers are not impaired without access to unbundled local circuit switching, pursuant to the guidance set forth below.[1469] In doing so, we ask the states to examine evidence of sources of impairment other than hot cuts, in the manner we describe below, as the record shows that requesting carriers may be impaired without access to unbundled incumbent LEC local circuit switching because of operational and economic factors other than those associated with hot cuts. Commenters have alleged that these barriers—which include poor incumbent LEC performance in fulfilling unbundling, collocation, and other statutory obligations, difficulties in performing customer migrations between competitive LECs, difficulties in performing collocation

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[1469] State commissions can alternatively make a finding that there is impairment based on other economic and operational factors in the manner explained below.

cross-connects between competing carriers,[1470] and the significant cost disadvantages competitive carriers face in obtaining access to the loop and backhauling the circuit to their own switches[1471]—can be sufficient to hinder or prevent entry even if impairment caused by hot cuts were fully resolved. Although these factors *do not* form the basis of our national impairment finding,[1472] we recognize that the record evidence indicates that these factors may give rise to impairment in a given market, even setting aside the problems associated with hot cuts, and that they therefore will be relevant to state commissions' determinations with respect to unbundled local circuit switching. We describe these potential barriers here.

(a) Operational Factors

477. *Collocation.* We find that the absence of sufficient collocation space in the incumbent LEC central office or offices might in some markets render competitive entry impossible and thus result in impairment. The record evidence indicates that in some markets, competitive LECs may face a lack of sufficient collocation space in the incumbent LEC's central office or offices. For competitive LECs that rely on the incumbent LEC's transmission facilities but not on unbundled local circuit switching, collocation of facilities in the incumbent's central office is essential to the provision of local service. The incumbent's failure to provide adequate collocation space may render competitive entry

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[1470] *See, e.g.*, BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter.

[1471] *See* UNE-P Coalition Comments at 44-46; WorldCom Jan. 8, 2003 *Ex Parte* Letter at 3 (noting that switching has high fixed costs that must be spread over a large number of customers if a competitive carrier is to achieve cost efficiencies similar to those enjoyed by the incumbent LEC).

[1472] The evidence in the record is not sufficiently detailed to conclude that impairment exists on a national basis due to these factors, as they vary on a geographic basis.

uneconomic. Thus, as set forth below, when states evaluate the prospects for self-provisioned switching in a given market, we direct them to consider whether a lack of sufficient collocation space gives rise to impairment in that market.

478. *Incumbent LEC Provisioning of Competitive LEC-to-Competitive LEC Cross-Connects.* We further find that an incumbent LEC's failure to provide cross-connections[1473] between the facilities of two competitive LECs on a timely basis can also result in impairment. Competition in the absence of unbundled local circuit switching requires seamless and timely migration not only to and from the incumbent's facilities, but also to and from the facilities of other competitive carriers.[1474] Such interconnection requires that the incumbent LEC place cross connections between the competitive carriers' facilities in its central office on a timely basis. The incumbent's failure to do so will tend to delay competitors' entry, and thus to increase competitors' costs. We conclude that in some cases, such failure can give rise to impairment in the absence of unbundled local circuit switching.

[1473] Cross-connection is the "attachment of one wire to another usually by anchoring each wire to a connecting block and then placing a third wire between them so that an electrical connection is made." *Id.*; *see also* AT&T Brenner Decl. at para. 21; Z-Tel Comments, Declaration of Peggy Rubino at para. 12.

[1474] *See Collocation Remand Order*, 16 FCC Rcd at 15436, 15464-78, paras. 2, 55-84 (concluding that "while an incumbent LEC need not allow collocators to install and maintain cross-connects between different carriers' collocated equipment, an incumbent LEC itself must provide these cross-connects upon reasonable request"); *Local Competition Order*, 11 FCC Rcd at 15801, para. 594 ("We believe that it serves the public interest and is consistent with the policy goals of section 251 to require that incumbents permit two or more collocators to interconnect their networks at the incumbent's premises."); *UNE Remand Order*, 15 FCC Rcd at 3777-78, paras. 178-79.

(b) Economic Factors

479. Competing carriers contend that many economic factors also prevent them from using UNE-L and thus impair their ability to serve the mass market without access to unbundled switching. Competing carriers maintain that even using the most efficient network architecture available for entry using the UNE-L strategy, they are at a significant cost disadvantage vis-à-vis the incumbent in all areas. In addition to the hot cut-related costs discussed above, competitive LECs cite the cost of backhauling the voice circuit to their switch from the customer's end office.[1475] They allege that these hot cut and backhaul costs are not faced by the incumbent, and thus put competing carriers at a significant relative disadvantage.[1476] The costs faced only by competitive LECs are, they claim, especially burdensome given the high churn rates associated with serving mass market customers that they face in the first few months of service. Incumbent LECs respond that the marketplace evidence showing deployment of switches for both business and residential customers, and an analysis of the costs and revenues of entry

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[1475] BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 3-4; Letter from Joan Marsh, Director, Federal Regulatory Affairs, AT&T, to Marlene Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2-5 (filed Nov. 26, 2002) (AT&T Nov. 26, 2002 *Ex Parte* Letter); AT&T Oct. 4, 2002 *Ex Parte* Letter at 8-9, 21; Letter from Joan Marsh, Director, Federal Regulatory Affairs, AT&T, to Marlene Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 6-11 (filed Nov. 12, 2002) (AT&T Nov. 12, 2002 *Ex Parte* Letter); WorldCom Oct. 12, 2002 *Ex Parte* Letter, Attach. at 34-38; WorldCom Bryant Reply Decl. at paras. 22-24.

[1476] *See, e.g.*, ASCENT Comments at 36; ASCENT Reply at 7; WorldCom Nov. 15, 2002 Customer Churn *Ex Parte* Letter; BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 4; CompTel/PACE Oct. 31, 2002 *Ex Parte* Letter at 2-4. The current system of hot cuts involves a constant charge per line, such that there are no benefits from handling larger volumes. This may change with the use of a batch cut over system, however, if volume discounts are provided to competitors.

using the UNE-L strategy, demonstrate that competitors are able to enter the voice mass market economically, and that economic factors do not justify a national impairment finding. As described above, we believe that economic and operational barriers associated with the hot cut process do justify such a national finding, but authorize the state commissions to find otherwise where there is no impairment. In this section, we discuss economic factors that, based on our record, may be relevant to the states' determinations.

480. The need to backhaul the circuit derives from the use of a switch located in a location relatively far from the end user's premises, which effectively requires competitors to deploy much longer loops than the incumbent.[1477] Competing carriers assert that the costs of backhaul, which include the costs of collocating in the customer's serving wire center,[1478] installing equipment in the wire center in order to digitize, aggregate, and transmit the voice traffic, and paying the incumbent to transport the traffic to the competitor's switch, put them at a significant cost disadvantage to the incumbent.[1479] Since many of these costs are fixed, competitors argue that these costs must be spread over a large

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[1477] BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 3; AT&T Oct. 4, 2002 *Ex Parte* Letter at 8.

[1478] On average, for example, NewSouth estimates that it incurs costs totaling approximately $500,000 over the first 3 years at each collocation site. NewSouth Reply at 25-26; NewSouth Fury Reply Aff. at para. 4. According to NewSouth, these costs include expenses associated with building the collocation space, recurring charges for rent and power, and the costs of purchasing and installing the equipment in the collocation space. NewSouth Reply at 26; Fury Reply Aff. at para. 4.

[1479] BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 3-4; AT&T Nov. 26, 2002 *Ex Parte* Letter at 2-5; AT&T Oct. 4, 2002 *Comparing ILEC and CLEC Local Network Architectures Ex Parte* at 8-9, 21; AT&T Nov. 12, 2002 *Ex Parte* Letter, Attach. at 6-11; WorldCom Oct. 12, 2002 *Ex Parte* Letter, Attach. at 34-38; WorldCom Bryant Reply Decl. at paras. 22-24.

number of customers if a competitive carrier is to achieve cost efficiencies similar to those enjoyed by the incumbent LEC.[1480] Thus in smaller wire centers, where the competitors' customer base is likely to be smaller and they are unable to take advantage of scale economies, the cost disadvantage due to backhaul is much larger.[1481]

481. In support of their arguments, several parties have submitted detailed cost studies and business case analyses concerning whether entry into the mass market is economically feasible without access to the incumbent's

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[1480] WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 3-4.

[1481] BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 4-6; Letter from Access Integrated Networks *et al.*, to Marlene Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3-6 (filed Dec. 11, 2002) (Access Integrated Networks *et al.* Dec. 11, 2002 *Ex Parte* Letter). For example, WorldCom finds that the average monthly cost of collocation, transport, hot cut, and collocated equipment assuming that it serves 7% of the local service market and has no physical network to begin with, is $11.40 per line served in incumbent end offices with switches larger than 25,000 lines, and $49.92 in incumbent end offices with switches under 5,000 lines. WorldCom Comments at Appendix, Table 1. AT&T examined the costs attributable to hot cuts and backhaul that are not faced by the incumbent. In the first study it found that for a model competitor, the cost disadvantage for a 20% market share is $9.53 per line served in a typical incumbent end office of 15,000 lines and $8.12 per line in a wire center of 100,000 lines. AT&T Jan. 17, 2003 *Ex Parte* Letter at 2-3. The second study examined the cost of serving customers in every existing incumbent wire center for a model competitor, assuming that collocation space and backhaul are being used for other purposes as well as for serving analog loops. The study showed that to serve all incumbent wire centers with at least 5,000 lines, a competitor with 5% market share will suffer a cost impairment per line of $4.72 for collocation and digitization/concentration equipment costs, $0.84 for backhaul transport, and $2.44 for hot cuts, with a cost offset of $0.60 because the competitor is able to use all digital lines, for a net cost disadvantage of $7.41. If the competitor has a 20% market share in each end office, the net cost disadvantage falls to $6.24, taking into account the $0.60 cost offset. AT&T Jan. 17, 2003 *Ex Parte* Letter at 3-4 & n.9.

switch.[1482] The studies submitted by AT&T[1483] and WorldCom[1484] examine only the costs a competing carrier would incur that would not be incurred by the incumbent to determine whether a competitive LEC utilizing UNE-L would suffer a cost disadvantage relative to the incumbent.[1485] AT&T submitted two studies, one of which found that competitors suffer from a cost disadvantage of at least $8 per line in larger wire centers, and from a greater cost disadvantage in smaller incumbent end offices.[1486] AT&T

[1482] *See generally* AT&T Jan. 17, 2003 *Ex Parte* Letter; BellSouth Jan. 30, 2003 *Ex Parte* Letter; BellSouth Jan. 30, 2003 *Ex Parte* Letter; Letter from James C. Smith, Senior Vice President, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Jan. 14, 2003) (SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter); WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter.

[1483] AT&T Jan. 17, 2003 *Ex Parte* Letter.

[1484] WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter.

[1485] In addition, Birch and PACE submitted a joint analysis of the costs of market entry. *See* Letter from Genevieve Morelli, Counsel for PACE, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4, 6 (filed Dec. 9, 2002) (PACE *et al.* Dec. 9, 2002 *Ex Parte* Letter). Although not a full cost study, this analysis purported to show that it was uneconomic for competing carriers to serve DS0 customers via either existing enterprise switches or alternative approaches such as the use of EELs or incumbent LEC multiplexers. *Id.* Granite also submitted an analysis of its projected costs to enter a market using its own switch. *See* Letter from William B. Wilhelm, Jr. and Patrick J. Donovan, Counsel for Granite, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1-2 & Attach. (filed Dec. 16, 2002) (Granite Dec. 16, 2002 *Ex Parte* Letter). This analysis suggests that, to enter the Boston local market, a competing carrier using its own switch would incur costs of $12 million during the first year. *Id.*, Attach. at 3. Based on this analysis, Granite argues that migration from service using unbundled incumbent LEC local circuit switching to UNE-L is not economically feasible. *Id.* at 1-2.

[1486] In the first study, AT&T found that for a model competitor, the minimum cost disadvantage to a competing carrier is $8.12 per line, assuming a 20% market share in a wire center of 100,000 lines. The cost

argues that this cost disparity means that competitors are impaired without access to the incumbent's switching. WorldCom's study purports to show that, assuming a market share of seven percent, WorldCom suffers from a cost disadvantage of at least $10 per line, in wire centers where it has its own collocation, transport and nearby switch, and that this disadvantage rises to $21.59 per line in wire centers where it lacks facilities and collocation. WorldCom further argues that in central offices with fewer than 25,000 residential lines, the cost of UNE-L service will constitute an insurmountable barrier to entry and competition, even if there are significant reductions in incumbent LEC charges.[1487]

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disadvantage was larger for smaller wire centers and lower market shares. For a typical incumbent end office of 15,000 lines, the total net impairment was found to equal $9.53. AT&T Jan. 17, 2003 *Ex Parte* Letter at 2-3. The second study examined the costs of serving customers in every existing incumbent wire center for a model competitor, assuming that collocation space and backhaul were being used for other purposes as well as serving analog loops. The study showed that to serve all incumbent wire centers with at least 5,000 lines, a competitor with 5% market share will suffer a cost impairment per line of $4.72 for collocation and digitization/concentration equipment costs, $0.84 for backhaul, and $2.44 for hot cuts, with a cost offset of $0.60 because the competitor would be able to use all digital lines, for a net cost disadvantage of $7.41. If the competitor had a 20% market share in each end office, the cost disadvantage would fall to $6.24, taking into account the $0.60 cost offset. *Id.* at 3-4 and n.9.

[1487] WorldCom examined the additional costs (in the major categories of collocation, digitization and concentration, transport, switching, OSS, and hot cuts) incurred in serving residential customers in BOC territories using WorldCom switches, based on WorldCom's existing network. WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter. BOC central offices were classified into three groups: offices where WorldCom already has collocation, on-net transport, and nearby switching (case 1); offices where WorldCom has a switch in the LATA but no collocation or transport (case 2); and offices with no WorldCom collocation, switching or transport (case 3). Estimates of the cost disadvantage were broken down by case, size of wire center, WorldCom's assumed market share, and whether WorldCom uses UNEs or special access for transport. WorldCom claimed that, assuming a 7% market share, on average WorldCom would

WorldCom also claims that in central offices serving 25,000 or more residential lines, competitive LECs that achieve a reasonable (*e.g.*, seven percent) market share can economically migrate customers served by unbundled local circuit switching to their own switches, provided that operational and economic barriers have already been substantially reduced or removed by state commissions.[1488]

482. The studies presented by SBC and BellSouth examine whether economic entry is possible, taking into consideration the revenue opportunities available and the typical costs of utilizing a UNE-L strategy. The incumbents claim that competitive LECs have successfully served the business market using self-provisioned switches, and that they could use these switches to serve the mass market as well, thus taking advantage of economies of scope.[1489] They note, too, that competitive LECs are free to serve only high-margin customers, rather than being required, as are the incumbents, to provide underpriced service to rural and/or residential

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be at a 56% ($10.03), 178% ($17.92), and 301% ($25.84) cost disadvantage using UNE-L relative to the BOCs' unbundled loop and circuit switching combination cost (excluding the cost of the loop for both) for cases 1, 2, and 3, respectively. WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 2-3, Attach. A at 6-7 and Appendix Table 1. We note that most of the additional costs were due to the costs of collocation and of the equipment needed for backhaul. For example, for case 3 with 7% market share, the digitization, concentration, and switching equipment and OSS cost $6.70 and collocation $11.08, while transport was $1.31 and hot cut charge was $2.50, for a total cost of $21.59. MICRA Jan. 8 Study at 3-6 and App. Table 1.

[1488] *See* WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 7; Letter from A. Richard Metzger, Counsel for WorldCom, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Jan. 23, 2003) (WorldCom Jan. 23, 2003 Unbundled Switching *Ex Parte* Letter).

[1489] BOC UNE Fact Report 2002 at II-10-11.

consumers.[1490] Moreover, incumbent LECs contend that switches deployed by competitive LECs may be able to serve larger geographic areas than switches deployed by the incumbent LEC, thereby reducing the per-line fixed cost of purchasing circuit switching capability and allowing requesting carriers to create their own switching efficiencies.[1491] Based on the prices competitors have charged to high-revenue mass market customers, and the likely scale economies entrants could achieve using a UNE-L strategy with collocated transmission equipment, incumbent LECs argue that competitors could economically enter and serve the mass market using their own centrally located switches.[1492] Specifically, SBC and BellSouth claim that competitive LECs can earn a positive margin providing facilities-based residential service in wire centers with 5,000 or more lines.[1493]

[1490] *See* Verizon Reply at 42-43; SBC Reply at 2, 26; BellSouth NERA Reply Decl. at viii.

[1491] *See* BellSouth Comments at 79-80 (citing BOC UNE Fact Report 2002 at II).

[1492] SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter.

[1493] *See* SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter at 2; BellSouth Jan. 30, 2003 *Ex Parte* Letter. In its study, SBC assumes that MCI had deployed switches to serve residential customers in wire centers with 5,000 or more lines (which, according to SBC, accounts for 57.7% of SBC wire centers in suburban and rural areas). In California, Michigan, and Texas, the SBC study determines that MCI would be able to cover its UNE-L provisioning costs if MCI set its retail prices (for residential customers) at $40-$60 per line and had a market share of at least 5% in each wire center with more than 5,000 lines. SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter at 3. SBC's model compares the costs of a UNE-L arrangement to the residential revenue opportunities available to competitors. *See* Letter from Jay Bennett, Executive Director—Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4 (filed Jan. 24, 2003) (SBC Jan. 24, 2003 *Ex Parte* Letter). Specifically, SBC concludes that competitive LECs winning 5% to 10% of access lines in wire centers of 5,000 access lines or more can profitably serve residential customers using their own switches. *Id.*

SBC further asserts that any losses in the wire centers of under 5,000 lines would be more than offset by the profits a competitive LEC will accrue from serving wire centers of 5,000 lines or more. Thus, SBC argues, a competitor could economically serve all wire centers.[1494]

483. We find that these studies fail to provide sufficient evidence to form a basis for making a national finding of no impairment, or a finding of impairment on the basis of non-hot cut factors alone. These studies either failed to adopt the proper framework for determining impairment, were insufficiently granular, or failed to provide sufficient support for the parameters they employed. We observe that the results of these studies were very sensitive to the inputs used and the assumptions employed. The studies' cost estimates depend on the competitor's predicted market share in each incumbent end office and the size of the end office, as well as on the cost of various UNEs and equipment, some of which

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BellSouth examines whether a competitor with a 5% market share could profitably serve customers in wire centers of various sizes, grouped into the following categories: greater than 25,000 lines, 15,000 to 25,000 lines, 5,000-15,000 lines, and under 5,000 lines. The study relies on the cost estimates supplied by WorldCom, to which BellSouth adds the cost of an average UNE loop. *See generally* WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter. Under each of the three scenarios presented, which varies according to the estimates of collocation costs and retail revenues available, BellSouth's study determines that competitors could profitably serve the groups of wire centers with greater than 5,000 lines, and would lose money only for wire centers of less than 5,000 lines. BellSouth Jan. 30, 2003 *Ex Parte* Letter at 7-9.

[1494] SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter at 3-4 ("The critical issue is not whether CLECs can serve every wire center profitably, but whether they can viably serve a particular *market*. Because wire centers with fewer than 5,000 lines account for a minority of all subscriber lines, notwithstanding that they represent almost half (42.3%) of SBC's wire centers, its is reasonable to assume that any losses a CLEC incurs in those wire centers will be more than offset by profits earned in larger wire centers in those same markets.")

were disputed.[1495] The cost estimates were also sensitive to whether or not the competing carrier was assumed already to have installed facilities, such as collocation, transmission equipment and backhaul, a switch, and/or their own transport network, for the purpose of providing other services—for example, to serve the medium and large enterprise market.[1496] The studies failed to provide sufficient support for many of these parameters, and often failed to take into account geographic variations in these parameters. While providing significant evidence that competitors operate at a cost disadvantage compared to the incumbent, the studies presented by WorldCom and AT&T also did not adopt the proper framework, because they failed to consider all revenue opportunities associated with entry. These studies were therefore unable to determine when entry would be uneconomic. The incumbent LEC studies also used incorrect revenues, failing to use the likely revenues to be obtained

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[1495] Besides the total number of lines in each incumbent end office and the competitor's market share, other input parameters that affect the calculation included competitor capital costs; depreciation rates; maintenance costs; customer churn rates; collocation space preparation costs and monthly rental fees; digital loop carrier equipment costs, capacities and degree of concentration; UNE transport and special access charges; competitor switch termination costs; and hot cut costs. AT&T Jan. 17, 2003 *Ex Parte* Letter at 2.

[1496] Thus, a competitor may have already set up collocation and transport (using the incumbent's transport network) for a particular end office, and installed its own switch, in order to serve business customers in that end office. Some competing carriers also have established extensive fiber transport networks in metropolitan areas. Use of these facilities would potentially reduce or eliminate the costs of collocation, transmission equipment, backhaul, and switching. AT&T Jan. 17, 2003 *Ex Parte* Letter at 3; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter, Attach. A at 3-6; SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter at 3. In these cases, the cost of these facilities would have already been recovered by the revenues recovered in connection with these other services, and thus the carriers would be taking advantage of the scope economies available from the facilities' other uses.

from the typical customer. Moreover, all of the studies relied on averages, either national or regional, for some of their revenue and cost parameters, despite the fact that a granular analysis must wherever possible account for market-specific factors. Accordingly, based on the foregoing, the studies provide insufficient evidence either for or against a finding of impairment.

484. However, we are persuaded that other economic factors, in addition to the economic and operational barriers associated with the current hot cut process that we have already identified, may make entry uneconomic without access to the incumbent's switch. If nothing else, the evidence provided to us demonstrates that whether entry will be economic depends critically on the values of certain factors affecting a competing carrier's likely costs and revenues,[1497] and that these factors vary significantly among locations and types of customers.[1498] It is quite possible that

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[1497] According to the standard set forth above, our analysis must take into consideration the full range of revenues that are likely to be obtained by an entrant providing voice and related services, and the costs likely to be incurred. All factors affecting a competing carrier's likely revenues and costs must be examined to determine if they affect its ability to enter a market economically. Because economic entry depends on whether the sum total of all likely revenue sources exceeds the sum total of all likely costs of serving the market, any factor that limits or lowers the potential revenues available to a competing carrier, or raises the cost of serving a set of customers, is a potential barrier to entry. It is only by evaluating all the factors together that we may determine whether the likely revenues from entry will exceed the likely costs. Therefore, no factor should be examined in isolation.

[1498] To utilize a UNE-L strategy, which is the most likely network architecture a new competing carrier would use to serve a mass market voice customer in the absence of unbundled switching, a competing carrier would have to incur costs for the loop, backhaul, collocation space, digitizing and aggregating equipment in the customer's wire center, a switch, interconnection, transport, and the transfer of the customer to its switch using a hot cut, as well as internal administrative costs, the cost of capital, and other costs. Likely revenues depend on the prevailing retail

carriers can economically enter with their own facilities in low cost, high revenue locations, but not in high cost, low revenue locations.[1499] Although we lack sufficient evidence in the record to determine the accuracy of the inputs used to generate their results, we observe that all of the studies mentioned—including the BOC studies—suggest that it would be uneconomic for a competing carrier to serve customers in smaller wire centers. All the studies found that in such wire centers, entry would be much more expensive for the competitive LEC than for the incumbent, or simply would be uneconomic. WorldCom found that, for customers for which it lacks facilities, its cost disadvantage rises from an average of $11.40 per line for wire centers of over 25,000 lines, to $49.92 for wire centers of under 5,000 lines.[1500] AT&T's study shows that, assuming a market share of seven percent, a competitor's cost disadvantage rises from $8.78 for a wire center of 100,000 lines to $71.73 for a wire center of 2,000 lines.[1501] Even the studies by the incumbent LECs, SBC and BellSouth, found that entry would be uneconomic for

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rate and other revenues to be gained from selling local service, including those associated with access charges and vertical features. Also important is whether a competing carrier can sell other products in the region or wire center, which might generate sufficient revenues to help justify expenditures on collocation, backhaul, and a switch.

[1499] Entry is more likely to be economic in locations served by larger wire centers with greater line density, and in areas with low UNE loop rates, high retail rates relative to cost, high subscription rates for vertical features, large numbers of business customers, low UNE rates, and high retail rates. This list does not necessarily include all possible factors that may vary.

[1500] WorldCom Jan. 8, 2003 *Ex Parte* Letter at 2-3, Attach. A at 6-7 and App. Table 1, Case 3.

[1501] AT&T Jan. 17, 2003 *Ex Parte* Letter, Attach. 1 (using 7% market share and switch sizes of 100,000 and 2,000 lines used as inputs).

wire centers of under 5,000 lines.[1502] BellSouth found that for wire centers of under 5,000 lines,[1503] a competitor would likely experience a net loss of $1.93 per line assuming BellSouth's average retail local revenues.[1504] However, as discussed above, there was significant disagreement concerning whether entry would be economic for larger wire centers.[1505]

485. All of these studies, including those provided by the BOCs, strongly support the need for a more granular analysis of impairment. We have insufficient evidence in the record, however, to conduct this granular analysis. Such an analysis would require complete information about UNE rates, retail rates, other revenue opportunities, wire center sizes, equipment costs, and other overhead and marketing costs. While some of this information was submitted to us, or is available to us from other sources, the available data do not sufficiently facilitate a granular inquiry into precisely where entry is economic. That market-specific data is needed is indicated by the significant variation in the costs and revenues an efficient entrant is likely to face. For example, costs appear to vary significantly among locations and types of customers.[1506] The recurring and non-recurring charges for critical UNE inputs such as collocation, loops, and transport often vary substantially between states.[1507] Within a state

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[1502] SBC admits that competitive LECs cannot earn a profit serving customers in wire centers of under 5,000 lines, but provides no analysis of the likely per-line losses. SBC Jan. 14, 2003 *Ex Parte* Letter.

[1503] The average size of these wire centers is 1,968 lines. BellSouth Jan. 30, 2003 *Ex Parte* Letter at 8.

[1504] BellSouth Jan. 30, 2003 *Ex Parte* Letter at 8.

[1505] *See supra* Part VI.D.4.a.

[1506] *See supra* note 1498.

[1507] *See supra* note 1301.

UNE loop rates can vary tremendously among rate zones.[1508] Parties also agree that the average cost per customer for collocation and equipment varies according to the number of customers served in a wire center, which is likely to depend on the size of the wire center and the likely market share of an efficient competitor.[1509] Some costs also vary according to the total size of the market served.[1510] The revenue estimates, which depend on customers' predicted expenditures on local voice service, were particularly controversial, and appear to have had a significant impact on the results.[1511] Retail rates can vary between states, by the type of customer, and within the state.[1512] Other revenues from mass market customers,[1513]

[1508] Most states have adopted three rate zones, which is the minimum required by the Commission. *See Local Competition Order*, 11 FCC Rcd at 15882-83, para. 765. Some states have adopted four zones.

[1509] *See supra* Part VI.D.6.a.(i).

[1510] AT&T Jan. 17, 2003 *Ex Parte* Letter at 2-3, 7-8 (discussing collocation space costs, which relate to the number of customers served, and backhaul costs, which relate to the distance between the customers' premises and the competitive LEC's switch); WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter, Attach. at 7 ("Economies of scale are critical to the level and structure of costs incurred by the CLECs.").

[1511] There is significant disagreement concerning what revenues to use in calculating net profits. AT&T, WorldCom, and Z-Tel argue that retail rates should not be relied upon, and that instead we should examine the cost disparity the competitor suffers using UNE-L relative to the incumbent. AT&T Jan. 17, 2003 *Ex Parte* Letter at 3; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at Attach. A, 3-6. SBC and BellSouth argue that we should examine whether entry is economic using typical retail revenues. SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter at 3. In its study SBC used the typical retail revenue charged by WorldCom for its nationwide offering of combined local and long distance service, called The Neighborhood. *Id.* BellSouth suggests using the incumbent's average retail per-line local revenues, or the price of the incumbent's retail local offerings as the basis for determining competitor's revenues. BellSouth Jan. 30, 2003 *Ex Parte* Letter at 2-8.

[1512] *See supra* note 1303.

and additional revenue opportunities from other types of customers,[1514] may also vary between and within states. Therefore, we expect that the states will consider the economic factors discussed here on a market-by-market basis and will determine whether it is appropriate to find "no impairment" in any particular market. This approach is consistent with our standard, which requires a determination of impairment on a granular basis, and with the dictates of *USTA*.[1515]

(ii) State Actions and Determinations

486. In this section, we ask state commissions to take certain actions designed to alleviate impairment in the markets over which they exercise jurisdiction. We also set forth a detailed process by which states may perform analysis on a more granular basis, and may identify where competing carriers are not impaired without access to unbundled switching.

(a) Incumbent LEC Batch Cut Processes

487. We have found that a seamless, low-cost batch cut process for switching mass market customers from one carrier to another is necessary, at a minimum, for carriers to compete

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[1513] Revenues associated with related services purchased by mass market customers, such as vertical features, are not included in residential rates, and may vary among the states and within a state. Revenues can also vary according to the state Subscriber Line Charge (SLC) and the state and federal access charges that can be applied. FCC Reference Book at 1; *MAG Plan Order*, 16 FCC Rcd at 19636-37, 19669, paras. 47, 131. Many state commissions report setting intrastate access charges above cost. GAO Report on Universal Service at 18.

[1514] Additional revenue opportunities are likely to be greatest in areas with large numbers of enterprises, especially if some of those enterprises are heavy users of telecommunications services.

[1515] *USTA*, 290 F.3d at 422-26.

effectively in the mass market.[1516] We conclude that the loop access barriers contained in the record may be mitigated through the creation of a batch cut process by spreading loop migration costs among a large number of lines, decreasing per-line cut over costs.[1517]

[1516] Commissioner Abernathy emphasizes that despite the availability of a managed hot cut process in some states, carriers with their own switches have been increasing their reliance on unbundled switching. *See Commissioner Abernathy Statement* at 5 n.9. However, the record evidence demonstrates that competitive LECs have been forced to abandon plans to provide switch-based services to mass market customers because of the difficulties associated with the current hot cut process. *See supra* para. 466. Moreover, Commissioner Abernathy overlooks the fact that current market conditions warrant the availability of unbundling at a minimum, to transition to competitive switch deployment. *See* WorldCom Reply at 155. More importantly, Commissioner Abernathy fails to recognize that the record evidence indicates that incumbent LECs are not well-equipped to handle hot cut volumes even with the existence of a procedure to manage bulk migrations on a project-managed basis. Indeed, in New York, where Verizon has worked with carriers such as Broadview and AT&T to handle bulk migrations on a project-managed basis, there continue to be quality issues associated with hot cuts. Broadview Jan. 15, 2003 *Ex Parte* Letter at 6. This fact is illustrated by an order issued by the New York Department confirming that although the New York hot cut process is "working" and is "well refined . . . at least at current volumes," "an efficient bulk-hot-cut process and rate is critical to the development of facilities-based competition," and thus instituted a proceeding to address that problem. *See* BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 9 n.26 (citing Order Instituting Proceeding, *Proceeding on Motion of the Commission to Examine the Process, and Related Costs of Performing Loop Migrations on a More Streamlined (e.g., Bulk) Basis*, Case 02-C-1425 (Nov. 22, 2002)).

[1517] In theory, electronic loop provisioning might one day obviate the need for a hot cut when migrating a loop from one carrier's switch to another's. *See, e.g.*, AT&T Comments, Attach. C, Declaration of Irwin Gerzberg, at paras. 6, 18-19, 25-28; Z-Tel Reply at 53. As discussed below, however, the record in this proceeding does not support a determination that electronic provisioning is currently feasible.

488. State commissions must approve, within nine months of the effective date of this Order, a batch cut migration process to be implemented by incumbent LECs that will address the costs and timeliness of the hot cut process. Alternatively, state commissions must make detailed findings explaining why such a process is not necessary in a particular market, as described below. We find that state regulators are closest to the facts particular to the provisioning issues applicable to their respective markets, and are in the best position to judge whether the incumbent LEC has indeed developed an efficient loop migration process. There can be no doubt that state commissions possess the competence to implement a cost-effective and fast process for provisioning unbundled local loops. State commissions possess the requisite expertise to apply Commission-prescribed standards, and they routinely utilize the processes and procedures—including discovery, sworn testimony, and cross examination on the record—that are essential to reasoned fact-finding. Should a state commission fail to approve a batch cut migration process or provide a detailed explanation why such a process is not necessary within nine months of this Order's effective date, an aggrieved party will be permitted to initiate a proceeding with this Commission.[1518]

489. As an initial matter, state commissions should adopt a batch cut over "increment" for migrating customers served by unbundled loops combined with unbundled local circuit switching to unbundled stand-alone loops. In other words, states should decide the appropriate volume of loops that should be included in the "batch." In conjunction with incumbent LECs and competitive LECs, states should also approve specific processes to be employed when performing a batch cut. The processes adopted will necessarily vary based on the relevant incumbent's particular network design and cut over practices. Generally, however, we expect these

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[1518] *See supra* Part V.E.2.a (discussing the role of the states).

processes to result in efficiencies associated with performing tasks once for multiple lines that would otherwise have been performed on a line-by-line basis. For example, pursuant to the processes in place in at least some states, the incumbent LEC currently will pre-wire circuits on the central office frame, verify the presence of dial tone, and communicate with competitive LECs regarding problems encountered on a line-by-line basis.[1519] Under a batch cut process, these activities might be undertaken simultaneously for all lines affected by a given batch order. In addition to developing a cost-effective hot cut process, state commissions should evaluate whether the incumbent LEC is capable of migrating batch cutovers of unbundled loops combined with unbundled local circuit switching to unbundled stand-alone loops for any requesting carrier in a timely manner. Specifically, state commissions may require that incumbent LECs comply with an average completion interval metric, including any further disaggregation of existing loop performance metrics (*i.e.*, quality or maintenance and repair metrics), for provisioning high volumes of loops. Finally, if they have not done so already, state commissions should adopt TELRIC rates for the batch cut activities they approve. These rates should reflect the efficiencies associated with batched migration of loops to a competitive LEC's switch, either through a reduced per-line rate or through volume discounts.

490. If a state should conclude that the absence of a batch cut migration process is not causing impairment for a particular market, however, that conclusion will render the

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[1519] *See, e.g., Application by Verizon New Jersey, Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization To Provide In-Region, InterLATA Service in New Jersey*, Supplemental Declaration of Patrick A. Garzillo and Marsha S. Prosini at Attach. 2, WC Docket No. 02-67 (filed Mar. 26, 2002) (describing Verizon's hot cut process in New York and New Jersey).

creation of such a process unnecessary. For example, in a small, rural wire center, where there is not a significant volume of customer migrations, the absence of a batch cut process may not cause impairment.[1520] In such cases, the state commission may decline to institute a batch cut process, so long as it instead issues detailed findings regarding the volume of UNE-L migrations that could be expected if competitive LECs were no longer entitled to unbundled local circuit switching, the ability of the incumbent to meet that demand in a timely and efficient manner using the existing hot cut process, and the non-recurring costs associated with the hot cut process. If a state commission determines that these findings demonstrate that existing hot cut practices would be adequate even in the absence of unbundled local circuit switching, and that the costs of such processes will not deter entry by competitive LECs, it may conclude that a batch cut process is not necessary. Only such detailed findings, however, will serve as an adequate substitute for the development of a batch cut migration process. We emphasize, moreover, that a state's decision not to develop a batch cut process will not relieve the state commission of its obligation to conduct the analysis set forth below in assessing whether requesting carriers are actually not impaired without access to unbundled switching in any given market.

491. *Other Issues.* We note that AT&T and WorldCom propose other mechanisms intended to mitigate the disruptions and other practical difficulties inherent in the current loop infrastructure.[1521] First, AT&T argues that

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[1520] *See* BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 7 (noting that Commission has found current hot cut processes adequate for the relatively small volumes under consideration in section 271 proceedings).

[1521] *See* AT&T Comments at 63; *see also* Letter from Kimberly Scardino, Senior Counsel, WorldCom, to Michelle Carey, Chief, Competition Policy Division, FCC, CC Docket Nos. 01-338, 96-98, 98-

unbundled switching for voice-grade loops is essential until incumbent LECs offer an electronic loop provisioning (ELP) method of transferring large volumes of local customers in the mass market from one carrier to another that it describes as being analogous to the existing process used to change a customer's long distance provider and as eliminating the need for physical hot cuts.[1522] We agree with AT&T that it is easier for a competitive LEC to manage the hot cut process when migrating large numbers of lines served by unbundled loops combined with unbundled local circuit switching to stand-alone loops than in individual hot cut situations, because the conversions can be project-managed by both the incumbent LEC and the requesting carrier.[1523] However, the evidence in the record suggests that an ELP process, to be effective, would require significant and costly upgrades to the existing local network at both the remote terminal and central office. AT&T's ELP proposal proposes to "packetize" the entire public switched telephone network for both voice and data traffic, at a cost one party estimates to be more than $100 billion.[1524] Incumbent LECs state that AT&T's proposal would entail a fundamental change in the manner in which local switches are provided and would require dramatic and extensive alterations to the overall architecture of every

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147 at 1 (filed Nov. 13, 2002) (WorldCom Nov. 13, 2002 DS0 EELs *Ex Parte* Letter).

[1522] AT&T Comments at 235-39. The UNE-P Coalition states that electronic provisioning will allow thousands more migrations per day, thereby affording more consumers a competitive choice of provider. UNE-P Coalition Comments at 7.

[1523] AT&T Comments at 237.

[1524] *See* SBC Reply at 131 (estimating that, including the entire cost of all equipment necessary to implement AT&T's proposal, and assuming that a rough benchmark based on SBC's Project Pronto would be applicable to other incumbent LECs, it could cost more than $100 billion to implement ELP nationwide).

incumbent LEC local telephone network.[1525] Given our conclusions above, we decline to require ELP at this time, although we may reexamine AT&T's proposal if hot cut processes are not, in fact, sufficient to handle necessary volumes.

492. In order to mitigate perceived difficulties with a transition from unbundled loops combined with unbundled local circuit switching to stand-alone loops, WorldCom proposes to establish rules ensuring that competitive LECs may obtain concentrated EELs at the DS0 level.[1526] WorldCom asserts that "TELRIC-priced EELs with concentration" could facilitate the competitive growth based on a UNE-L strategy.[1527] We agree with WorldCom that DS0 EELs can minimize collocation costs and increase the geographic reach of competitive LECs, thereby facilitating the expansion of competition based on UNE-L strategies in some markets.[1528] We decline, however, to establish at this time rules requiring concentration. The record demonstrates

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[1525] *See, e.g.*, SBC Reply at 129 (stating that AT&T's proposal would require substantial modifications to outside plant equipment, central office equipment, and OSS).

[1526] WorldCom Nov. 13, 2002 DS0 EELs *Ex Parte* Letter. The term "concentrated EELs" refers to an arrangement in which the competitive LEC utilizes concentration equipment allowing it to transport four to six DS0s or more on a single DS0-equivalent circuit. Thus, for example, using concentration a competitive LEC might use one DS1 circuit to carry 144 (rather than only 24) DS0s. WorldCom claims that such aggregation allows it to reach more customers more efficiently. *See id.* at 2; *see also* Letter from Jay Bennett, Executive Director—Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 4 (filed Nov. 14, 2002) (SBC UNE-Loop/Special Access *Ex Parte* Letter); Letter from Rebecca M. Sommi, Vice President—Broadview Networks *et al.*, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Nov. 26, 2002) (Broadview *et al.* Nov. 26, 2002 *Ex Parte* Letter).

[1527] WorldCom Nov. 13, 2002 DS0 EELs *Ex Parte* Letter.

[1528] *Id.*

that DS0 EELs could increase loop costs[1529] and may raise several additional operational issues.[1530] Accordingly, we are not convinced, based on the limited record before us, that we should require incumbent LECs to include concentration when they provide UNEs to requesting carriers.[1531]

(b) State Commission Determinations

493. Although we find competitors to be impaired without access to the incumbent LEC's switch on a national level when serving the mass market, we authorize state commissions to play a fact-finding role—as set forth below—to identify where competing carriers are not impaired without access to unbundled local circuit switching.[1532] As discussed

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[1529] Letter from Access Integrated *et al.*, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Dec. 11, 2002) (Access Integrated *et al.* Dec. 11, 2002 *Ex Parte* Letter); Letter from AT&T *et al.* to Michael K. Powell *et al.*, Chairman, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1 (filed Feb. 4, 2003) (AT&T *et al.* Feb. 4, 2003 *Ex Parte* Letter).

[1530] Letter from David A. Kunde, Executive Vice President of Network Operations, Eschelon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Oct. 21, 2002) (Eschelon Oct. 21, 2002 *Ex Parte* Letter).

[1531] According to WorldCom, some variant of the DS0 EEL is available and has been priced in at least the following states: Arizona, Arkansas, Colorado, Idaho, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Mexico, New York, North Dakota, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, and Wyoming. WorldCom Nov. 13, 2002 DS0 EELs *Ex Parte* Letter at 3 n.8.

[1532] Chairman Powell asserts that this proceeding has "transformed into a battle not over what should be unbundled, but who should decide—this Commission or the states." *See Chairman Powell Statement* at 3 (emphasis in original). Chairman Powell essentially characterizes the Commission's decision regarding unbundled switching as a battle over forum shopping. To the contrary, throughout the decision the

above, the record does not contain sufficient detail concerning which geographic and customer markets may in fact allow economic entry. In addition, impairments that exist today in certain markets may be remedied in the future due to the implementation of a batch cut process, as discussed above. Because our standard and the guidance from the *USTA* decision require that the determination of impairment be made on a granular basis, and because the record provides insufficient evidence concerning the characteristics of particular markets, we find it appropriate to ask the states to assess impairment in the mass market on a market-by-market basis.[1533]

Commission sets forth the same analytical framework—not only for the unbundled switching element but for other elements, including transport—that provides specific federal guidance under which the states perform a granular analysis to identify where competitive carriers are not impaired without access to a particular element. Surprisingly, Chairman Powell seems troubled by the framework as applied to unbundled switching yet appear unfazed by its existence and support its similar application to other elements.

[1533] Chairman Powell contends that with respect to unbundled switching there is a "default assumption of impairment" and that "[o]nly when all barriers to profitability have been eliminated does this Commission empower states to eliminate" unbundled switching. *Chairman Powell Statement* at 10 (emphasis in original); *see also* Commissioner Abernathy Statement at 6 (stating that "[t]he majority's multifactor test starts with a default presumption of impairment and cannot be overcome unless every conceivable obstacle to profitability has been eliminated."). That is incorrect. First, the Commission's decision makes a national finding "that competitors are not impaired without unbundled access to incumbent LEC local circuit switching when serving DS1 enterprise customers." Second, as to determinations of impairment regarding unbundled switching for mass market customers, the framework of analysis is essentially the same as the "assumptions" used to make findings of impairment for other elements, such as transport facilities. For example, for both unbundled local circuit switching and transport, the Commission requires states to examine triggers based on actual competitive deployment first, and when neither of these triggers is satisfied, the Commission sets forth factors that state commissions must apply to determine whether a market allows self-provisioning of the

494. We expect state commissions to follow a two-step process in determining whether to find "no impairment" in a particular market. In the first step, states will apply self-provisioning and wholesale triggers to a particular market to determine if the marketplace evidence of deployment of circuit switches serving the mass market requires a finding of no impairment. If the triggers are satisfied, the states need not undertake any further inquiry, because no impairment should exist in that market.[1534] If the triggers are not satisfied, the state commission shall proceed to the second step of the analysis, in which it must evaluate certain operational and economic criteria to determine whether conditions in the market are actually conducive to competitive entry, and whether carriers in that market actually are not impaired without access to unbundled local circuit switching. The states should evaluate evidence of switch deployment that does not automatically satisfy the triggers, but nonetheless may demonstrate the absence of impairment in the market.[1535]

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element. Where these factors suggest feasibility of self-provisioning of the element, states may render a "no impairment" finding. The dissent not only mischaracterizes the Commission's impairment test on unbundled switching, it also chooses to ignore the fact it supported application of the same test to other elements.

[1534] As explained below, we recognize that exceptional circumstances may preclude a state determination that there is no impairment in a given market even when one of the triggers has been satisfied.

[1535] Commissioner Abernathy states that, throughout this proceeding, she was willing to "peg[] non-impairment findings to deployment of a threshold number of switches." *Commissioner Abernathy Statement* at 3. However, throughout this process and prior to February 20th, she has been unwilling to distinguish the enterprise and mass markets in this analysis—the approach we adopt here. We believed—and continue to believe—that our approach is more consistent with the general impairment section approved unanimously by the full Commission. In that section, we agree to "conduct separate . . . impairment analyses based on [among others] two relevant customer classes—the mass market and the enterprise market." *See supra* para. 197.

(i) Defining the Market

495. The triggers and analysis described below must be applied on a granular basis to each identifiable market. State commissions must first define the markets in which they will evaluate impairment by determining the relevant geographic area to include in each market.[1536] State commissions have

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[1536] Chairman Powell's criticism of the discretion we give states to define the relevant geographic market for purposes of the switching analysis is misplaced. *See Chairman Powell Statement* at 6-7. It is fundamental to our general impairment analysis to consider whether alternative facilities deployment shows a lack of impairment in serving a particular market. Indeed, we adopt triggers for the states to apply to measure impairment by considering this alternative facilities deployment in our analysis of loops, transport, and switching. Although the incumbent LECs argue that we should apply a zone approach to transport and loops, we define the relevant geographic market for transport as route-by-route, and the relevant geographic market for enterprise loops as customer-by-customer, because of the economic and operational issues associated with alternative transport and loops deployment. As Chairman Powell recognizes, a switch can theoretically serve wide areas (provided that the costs of transporting traffic back to the switch are not cost prohibitive), so one would expect a broader market definition for switching than for loops or transport. *Chairman Powell Statement* at 7. Indeed, because we measure alternative "switching" in a given market, not switches located in that market, the physical location of the switch is not necessarily relevant to defining the geographic market. For example, a switch located in Rhode Island could satisfy the switching trigger in Massachusetts if it is serving customers in the relevant market in Massachusetts. *Chairman Powell Statement* at 7. To the extent the states define a geographic market broadly, it is more likely that such geographic market will capture sufficient switching alternatives to satisfy the trigger, thus resulting in removal of the particular UNE in that geographic market (a result the dissents would seem to endorse). The exact parameters of these geographic markets, however, cannot be defined nationally for switching because, as both incumbent LECs and competitive LECs agree, there are extreme variations in population density, and thus wire center line densities, across the country. *See generally* AT&T Jan. 17, 2003 *Ex Parte* Letter; SBC Jan. 14, 2003 UNE P *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter. States are, therefore, better positioned to draw these lines. Because states are more familiar with how these

discretion to determine the contours of each market, but they may not define the market as encompassing the entire state. Rather, state commissions must define each market on a granular level, and in doing so they must take into consideration the locations of customers actually being served (if any) by competitors,[1537] the variation in factors affecting competitors' ability to serve each group of customers,[1538] and competitors' ability to target[1539] and serve specific markets economically and efficiently using currently available technologies. While a more granular analysis is generally preferable, states should not define the market so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market. State commissions should

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variations have affected competitive entry, and because there was no credible record evidence to show how we could establish these boundaries based on a national rule, we ask the states to create these boundaries. We do, however, provide the states significant guidance. We require state commissions to define each geographic market on a granular level and direct them to take into consideration the locations of customers actually being served by competitors, the variation in factors affecting competitors' ability to serve each group of customers, and competitors' ability to target and serve specific markets economically and efficiently using currently available technologies. We make clear that state commissions cannot define a market as encompassing an entire state and that they should not define the market so narrowly that a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market.

[1537] For example, if competitors with their own switches are only serving certain geographic areas, the state commission should consider establishing those areas to constitute separate markets.

[1538] For example, if UNE loop rates vary substantially across a state, and this variation is likely to lead to a different finding concerning the existence of impairment in different parts of the state, the state commission should consider separating zones with high and low UNE loop rates for purposes of assessing impairment.

[1539] For example, competitors often are able to target particular sets of customers, or customers in particular wire centers or rate zones.

consider how competitors' ability to use self-provisioned switches or switches provided by a third-party wholesaler to serve various groups of customers varies geographically and should attempt to distinguish among markets where different findings of impairment are likely. The state commission must use the same market definitions for all of its analysis.[1540]

496. Thus, for example, a state commission may choose to consider how UNE loop rates vary across the state, how retail rates vary geographically, how the number of high-revenue customers[1541] varies geographically, how the cost of serving customers varies according to the size of the wire center and the location of the wire center, and variations in the capabilities of wire centers to provide adequate collocation space and handle large numbers of hot cuts. We recognize that many states have implemented varied administrative tools to distinguish among certain markets within a state on a geographic basis for other purposes including retail ratemaking, the establishment of UNE loop rate zones, and the development of intrastate universal service mechanisms. If a state determines, after considering the factors just described, that these already-defined markets would be appropriate to use in this context as well, it may choose to use these market definitions.

497. For purposes of the examination described here, mass market customers are analog voice customers that purchase only a limited number of POTS lines, and can only be economically served via DS0 loops. Some mass market customers (*i.e.*, very small businesses) purchase multiple DS0s at a single location. The previous Commission

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[1540] Therefore the market definitions used for the analysis of the triggers must also be used for the second step of the analysis, if the triggers are not satisfied.

[1541] These include, for example, business customers, as well as those residential customers likely to take vertical features and ancillary services such as data and voice mail service.

determined that incumbent LECs that make the EEL combination available are not obligated to provide unbundled local circuit switching to requesting carriers for serving customers with four or more DS0 loops in density zone one of the top fifty MSAs.[1542] The previous Commission found that under such circumstances, lack of access to unbundled local circuit switching would not impair requesting carriers in these specific areas.[1543] At some point, customers taking a sufficient number of multiple DS0 loops could be served in a manner similar to that described above for enterprise customers – that is, voice services provided over one or several DS1s,[1544] including the same variety and quality of services and customer care that enterprise customers receive. Therefore, as part of the economic and operational analysis discussed below, a state must determine the appropriate cut-off for multi-line DS0 customers as part of its more granular review. This cross over point may be the point where it makes economic sense for a multi-line customer to be served via a DS1 loop. We expect that in those areas where the switching carve-out was applicable (*i.e.*, density zone 1 of the top 50 MSAs), the appropriate cutoff will be four lines absent significant evidence to the contrary. We are not persuaded, based on this record, that we should alter the Commission's previous determination on this point.[1545] Accordingly, we

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[1542] *UNE Remand Order*, 15 FCC Rcd at 3822-31, paras. 276-98.

[1543] *Id.*

[1544] The evidence in the record indicates that it may be viable to aggregate loops at a customer location and provide service at a DS1 capacity or higher. Specifically, if a customer has enough lines to justify the expense of purchasing multiplexing equipment and a high-capacity line, it makes sense to aggregate the customer's loops at the customer's premises, which avoids the need for hot cuts at the incumbent LEC's central office.

[1545] Because the previous carve out only applied where "new" EELs were made available and because this Commission allowed state commissions to require switching to be unbundled even in areas where the

authorize the states, within nine months of the effective date of this Order, to determine the appropriate cross over point.[1546]

(ii) Triggers

498. We adopt triggers as a principal mechanism for use by states in evaluating whether requesting carriers are in fact not impaired in a particular market. As noted above, we give substantial weight to actual commercial deployment of particular network elements by competing carriers.[1547] We find that the presence of facilities-based competitors is the best indicator that requesting carriers are not impaired.

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carve-out test was met, it appears that the four-line carve-out was adhered to in very few areas in the country. SBC Reply at 30; BellSouth NERA Reply Decl. at 51-52. As part of their analysis, we expect states to make a finding of whether or not the carve out was in effect.

[1546] Commissioner Abernathy claims that our decision not to preserve the previous Commission's four-line carve-out represents a "potentially massive expansion" of unbundled switching. *Commissioner Abernathy Statement* at 8 n.27. This claim makes no sense. If a state finds that the appropriate cut-off for distinguishing enterprise from mass market customers in density zone 1 of the top 50 MSAs is four lines, there will be no more unbundled switching available than there was under the previous carve-out. Indeed, since the previous carve-out was conditioned on the availability of EELs and appears to have actually been in effect in very few areas of the country, *see supra* note 1545, setting the cut-off at an unconditional four lines would result in more customers being treated as enterprise customers subject to our finding of no impairment. If, on the other hand, a state finds based on record evidence that a cut-off of more than four lines is appropriate, more multi-line customers will be treated as mass market customers. But in no way will this result in an "expansion" of unbundled switching. To the contrary, as Commissioner Abernathy points out, "dozens of CLECs serve business customers of such size using their own switches." *Commissioner Abernathy Statement* at 8 n.27. Such widespread deployment of competitive switches would be considered under our mass market triggers. In such markets, then, it is more likely that there will be a finding of no impairment for the entire market, leading to significantly less unbundled switching than was available under the previous four-line carve-out.

[1547] *See supra* Part V.B.1 (discussing the impair standard).

Therefore, our triggers identify existing examples of multiple competitive LECs using their own switches to serve mass market customers, or to provide a switching wholesale service. We require state commissions to find "no impairment" in a particular market when either trigger is satisfied, subject to the limitations described below. The use of triggers keyed to objective criteria can avoid the delays caused by protracted proceedings and can minimize administrative burdens.[1548] Our selection of various thresholds is based on our agency expertise, our interpretation of the record, and our desire to provide bright-line rules to guide the state commission in implementing section 251.

499. The triggers we set forth rely on the number of carriers that self-provision switches or the number of competitive wholesalers offering independent switching capacity in a given market.[1549] In both cases, the competitive switch providers that the state commission relies upon in

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[1548] *Pricing Flexibility Order*, 14 FCC Rcd at 14267-68, para. 84.

[1549] As in the impairment triggers for high-capacity loops and dedicated transport, states also shall consider carriers that provide intermodal voice service using their own switch facilities (including packet and soft switches) that meet the requirements of these triggers and Part V above. *See supra* Part V.B.1.d.(ii) (describing intermodal alternatives generally, and factors affecting differences in the extent to which various intermodal alternatives are considered); *see also supra* paras. 332, 337 and notes 1256, 1278. In deciding whether to include intermodal alternatives for purposes of these triggers, states should consider to what extent services provided over these intermodal alternatives are comparable in cost, quality, and maturity to incumbent LEC services. *See supra* para. 97. For example, we note that CMRS does not yet equal traditional incumbent LEC services in its quality, its ability to handle data traffic, its ubiquity, and its ability to provide broadband services to the mass market. *See supra* para. 230. Thus, just as CMRS deployment does not persuade us to reject our nationwide finding of impairment, *see supra* para. 445, at this time, we do not expect state commissions to consider CMRS providers in their application of the triggers. In applying the triggers, states must consider packet switches to the extent they are used to provide local voice service to the mass market.

finding either trigger to be satisfied must be unaffiliated with the incumbent LEC and with each other.[1550] In addition, they should be using or offering their own separate switches.[1551] This requirement avoids counting as a true alternative a provider that uses the switching facilities of the incumbent LEC or *another* alternative provider that has already been counted. Moreover, the identified competitive switch providers should be actively providing voice service to mass market customers in the market. Identified carriers providing *wholesale* service should be actively providing voice service used to serve the mass market and be operationally ready and willing to provide wholesale service to all competitive providers in the designated market.[1552] However, the

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[1550] Affiliated companies will be counted together, in order to prevent gaming. We use the term affiliated and affiliate as the Act defines "affiliate." Section 3 of the Act defines the term "affiliate" as "a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership or control with, another person. For purposes of this paragraph, the term 'own' means to own an equity interest (or the equivalent thereof) of more than 10 percent." 47 U.S.C. § 153(1).

[1551] While the record indicates that competitors do not currently purchase wholesale switching from non-incumbent-LEC providers, we find, for the limited purposes described herein, that if a carrier were to acquire the long term right to the use of a non-incumbent-LEC switch sufficient to serve a substantial portion of the mass market, that carrier should be counted as a separate, unaffiliated self-provider of switching.

[1552] In circumstances where switch providers (or the resellers that rely on them) are identified as currently serving, or capable of serving, only part of the market, the state commission may choose to consider defining that portion of the market as a separate market for purposes of its analysis.

As we stated above, a party aggrieved by a state commission determination, including a decision on the appropriate market definition, may seek a declaratory ruling from this Commission. *See supra* para. 426 (discussing declaratory ruling determinations). Accordingly, this Commission will exercise its authority as necessary to ensure that state market determinations are reasonable and comport with the guidance set forth herein.

competing carriers' wholesale offerings need not include the full panoply of services offered by incumbent LECs.[1553]

500. For the purposes of these triggers, we find that states shall not evaluate any other factors, such as the financial stability or well-being of the competitive switching providers.[1554] Competing carriers in Chapter 11 bankruptcy protection are often still providing service. Regardless of their financial status, the physical assets remain viable and may be bought by someone else and remain in service.[1555] We note that requiring states to determine the financial ability of competitive wholesale providers to provide service in the future could hamper economic recovery efforts of companies in financial distress. The key consideration to be examined by state commissions is whether the providers are currently offering and able to provide service, and are likely to continue to do so.[1556]

(a) Self-Provisioning Trigger

501. We determine that—subject only to the limited exception set forth below—a state must find "no impairment" when three or more unaffiliated competing carriers each is serving mass market customers in a particular market with the use of their own switches.[1557] We set the number of

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[1553] We expect, however, that providers of switching will have an incentive to offer competitive terms with those of the incumbent LEC.

[1554] For the potential deployment analysis, however, the state commission may consider financial evidence relating to the difficulty in serving the mass market by existing competitive switch providers.

[1555] BOC UNE Fact Rebuttal Report at 20-24, 41-43.

[1556] For instance, states should review whether the competitive switching provider has filed a notice to terminate service in that market.

[1557] Competitors with their own switch that are providing service only on a wholesale basis should be counted for this test. Thus, for example, this test will be satisfied if there are three carriers providing service to mass market voice customers using their own switch, with two

competitive facilities at three for several reasons. First, we choose three self-provisioners as the appropriate threshold in order to be assured that the market can support "multiple, competitive" local exchange service providers using their own switches.[1558] Second, setting the trigger at three competitive facilities takes into consideration the likelihood that self-providers will not offer their service for wholesale, based on the evidence that local exchange service providers have generally not shown an interest in providing wholesale services, in contrast to the wholesale trigger, described below, which is met if there are two actual wholesalers.[1559] Finally, we believe that the existence of three self-provisioners of switching demonstrates adequately the technical and economic feasibility of an entrant serving the mass market with its own switch, and indicates that existing barriers to entry are not insurmountable.[1560]

502. We find, based on our review of the record, that competitive carriers providing service to mass market customers are impaired without access to local circuit

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of the carriers providing only retail service, and one providing only wholesale service.

[1558] We therefore deny Bell Atlantic's petition seeking the elimination of unbundled switching in all geographic markets for all customer classes where a single competitive switch has been deployed. Verizon Feb. 17, 2000 Petition for Reconsideration at 9-11.

[1559] *See* Talk America Reply at 19; SWCTA Comments at 8-9; SWCTA Reply at 7; Supra Comments at 36; Navigator Comments at 6; Eschelon Comments at 28-29.

[1560] We recognize that when one or more of the three competitive providers is also self-deploying its own local loops, this evidence may bear less heavily on the ability to use a self-deployed switch as a means of accessing the incumbent's loops. Nevertheless, the presence of three competitors in a market using self-provisioned switching and loops, shows the feasibility of an entrant serving the mass market with its own facilities.

switching.[1561] We determine that this is caused, in part, by the problems with the hot cut process identified above. We believe that this is unlikely to change until incumbent LECs implement batch cut processes. Nevertheless, particularly in light of the batch cut processes we are requiring states to approve and implement, we believe that competitive carriers will likely begin to utilize self-provisioned switches in greater numbers going forward. As discussed below, we require state commissions to monitor circumstances in their respective states for any significant changes in factors that may cause impairment.[1562] After a batch cut process has been put into place, we expect state commissions in subsequent reviews to reevaluate the circumstances surrounding self-provisioning, and expect that states will begin to find that requesting carriers are *not* impaired without access to unbundled

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[1561] The Chairman claims that "the Majority blinds itself to the significant self-provisioned switching capacity that exists in the market and the fact that a number of competitors have overcome whatever economic impediments exist and are using that switching capability to serve mass market customers." *Chairman Powell Statement* at 7-8. This claim is simply wrong. We require the states to apply triggers that look only at actual deployment as the principal mechanism for evaluating impairment in a particular market. If the deployment triggers are met, the states must find no impairment. Even if these triggers are not met, we require the states to give evidence of a single competitively deployed mass market switch "particularly substantial weight" and evidence of enterprise switch deployment "substantial weight" in determining whether entry is economic. *See supra* paras. 508, 510. Moreover, the Chairman's contention that significant competitive mass market switching deployment exists currently, while unbundled switching is universally available, is in direct tension with his claim that "it is unreasonable to expect that competitors will utilize self-provisioned switching capacity while a steeply-discounted and long-term UNE-P alternative exists." *Chairman Powell Statement* at 6.

[1562] *See* Part VI.D.6.a.(ii)(e) (discussing continuing review).

switching as competing carriers self-provision switches in greater numbers.[1563]

503. *Exceptional Sources of Impairment.* In exceptional circumstances, states may identify specific markets that facially satisfy the self-provisioning trigger, but in which some significant barrier to entry exists such that service to mass market customers is foreclosed even to carriers that self-provision switches. For example, if there is no collocation space available for additional competitive LEC equipment, further competitive entry may be impossible, irrespective of other economic or operational circumstances. Where the self-provisioning trigger has been satisfied and the state commission identifies an exceptional barrier to entry that prevents further entry, the state commission may petition the Commission for a waiver of the application of the trigger, to last until the impairment to deployment identified by the state no longer exists.[1564]

(b) Competitive Wholesale Facilities Trigger

504. Separate from the inquiry into self-provisioning, we direct states to consider whether switching facilities are available from competitive wholesale providers in a given market to serve mass market customers. Consistent with our approach with regard to transport and loops, we determine

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[1563] We note, as described below, that state commissions will undertake subsequent granular reviews. *See infra* Part VI.D.6.a.(ii)(e) (discussing continuing review).

[1564] We do not find these types of barriers to be applicable to the wholesale trigger described below, because if the wholesale trigger is satisfied, even if further facilities-based entry is inhibited, the existence of two wholesale providers already provides a certain assurance that necessary facilities can be obtained by new entrants at competitive rates. Therefore we limit the state's ability to petition us, when an exceptional barrier to entry has been identified, to the application of the self-provisioning trigger.

that carriers are not impaired if they are able to obtain switching from third parties offering access to their own switches on a wholesale basis. While the record shows that such wholesale alternatives are not generally available at this time, we establish this trigger as a mechanism for identifying markets with adequate wholesale alternatives, in the expectation such alternatives may well develop in the future. Therefore, state commissions should identify those markets in which requesting carriers are not impaired without unbundled local circuit switching because two or more competing carriers, not affiliated with each other or the incumbent LEC, offer wholesale switching service for that market using their own switch.[1565] In those markets, states should determine that requesting carriers are not impaired without access to unbundled local circuit switching. This test will ensure that local circuit switching can readily be obtained from a firm using facilities that are not provided by the incumbent.

505. We choose two competitive wholesale providers as the appropriate threshold because this standard ensures that states will only find "no impairment" where the market can support "multiple, competitive supply" and establishes an incentive for new local circuit switching facilities deployment while allowing competitive pressures from the wholesalers to control pricing and terms. A competitive carrier that is considering deploying switching facilities for the purpose of providing a wholesale offering is likely to be encouraged to deploy if its deployment will eliminate switching priced at TELRIC rates. Because we want to provide an incentive for competing carriers to deploy facilities, we do not demand the presence of more than two competitive wholesalers.[1566]

[1565] We note that carriers providing switching services to the mass market not willing to provide wholesale services will be counted in the self-provisioning trigger described above.

[1566] Thus, if we were to establish a higher number than two as the threshold, such as four, to ensure the market is fully competitive, the first facilities-based potential entrant might be deterred from entry by the

Finally, we find that two wholesale providers, in addition to the incumbent LEC, should provide competitive pressures on pricing and terms and minimize the risk of "umbrella pricing" while encouraging deployment.[1567]

(iii) Analysis of Potential Deployment

506. Above, we have found that actual competitive deployment is the best indicator that requesting carriers are not impaired and, therefore, emphasize that the states should apply the self-provisioning and wholesale triggers described above, in their determination of whether impairment exists. We recognize, however, that the self-provisioning trigger discussed above identifies only the existence of *actual* competitive facilities serving the mass market and does not address the *potential* ability of competitive LECs to deploy their own switches to serve this market. For example, there may well be markets where self-provisioning of switching is economic notwithstanding the fact that no three carriers have *in fact* provisioned their own switches. In such cases, we expect states to find "no impairment." Therefore, we find that where neither of the triggers described above have been satisfied, the state must conduct further analysis to determine whether the market in question is suitable for "multiple, competitive supply."

507. In evaluating whether to find that requesting carriers are not impaired without access to local circuit switching, notwithstanding a market's failure to satisfy the triggers described above, the states shall evaluate three types of

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prospect of facing competition from providers using unbundled local circuit switching for a long time—until three other facilities-based competitors enter. With a threshold of two, the first facilities-based entrant need only wait until one other facilities-based entrant appears, before a finding of no impairment is warranted and they no longer face competition with switching priced at TELRIC.

[1567] *See supra* para. 413 (describing umbrella pricing).

evidence, set forth more fully below. First, states must examine whether competitors are using their own switches to serve enterprise or mass market customers in the market at issue. Second, states must consider the role of potential operational barriers, specifically examining whether incumbent LEC performance in provisioning loops, difficulties in obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC, and difficulties in obtaining cross-connects in an incumbent's wire center, are making entry uneconomic for competitive LECs. Third, states must consider the role of potential economic barriers associated with the use of competitive switching facilities. Analyzing these factors in concert, state commissions must determine whether, in any particular market or markets, it is appropriate to find "no impairment."

(a) Evidence of Actual Competitive Deployment of Local Circuit Switches

508. States should first examine whether competitors are already using their own switches to serve voice customers in the relevant market. We determine that to the extent that there are two wholesale providers or three self-provisioners of switching serving the voice *enterprise* market, and the state commission determines that these providers are operationally and economically capable of serving the *mass* market, this evidence must be given substantial weight by the state commissions in evaluating impairment in the mass market. We find the existence of switching serving customers in the *enterprise* market to be a significant indicator of the possibility of serving the mass market because of the demonstrated scale and scope economies of serving numerous customers in a wire center using a single switch. Although switches serving the enterprise market do not qualify for the triggers described above, we believe that, after implementation of a batch cut process, switches being used to serve the enterprise market are likely to be employed to serve

the mass market as well, and that the state commission should investigate the feasibility of this. The evidence in the record shows that the cost of providing mass market service is significantly reduced if the necessary facilities are already in place and used to provide other higher revenue services, and a more efficient cut over process is in place.[1568] We choose three self-provisioners and two competitive wholesale providers as the appropriate threshold in order to be assured that the market can support "multiple, competitive" local exchange service providers using their own switch, and for the reasons described in the Trigger section above.[1569]

509. As with regard to the triggers described above, any competitive switch provider relied upon in the state's analysis here must be unaffiliated with the incumbent LEC and with any other carrier relied upon, and must be relying on its own switch.[1570] This requirement ensures that no provider that uses the switching facilities of the incumbent LEC or another alternative provider to provide service is counted as a separate alternative provider.

510. We also find that to the extent there is a switch in an area serving the local exchange mass market, this fact must be given particularly substantial weight. The existence of a competitor that is serving the local exchange mass market with its own switch provides evidence that the mass market

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[1568] For example, a study by WorldCom purports to show that the average cost disadvantage a competitor labors under relative to the incumbent is significantly lower if the competitor already has its own switching, collocation, and transport facilities in place ($10.03 per customer, assuming the competitor has a 7% market share), than if it must build and install them ($21.59 per customer). WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 3, Attach. A at 2, Appendix: Table 1.

[1569] *See supra* paras. 501, 505.

[1570] Affiliated companies will be counted together, in order to prevent gaming. As described above, we use the term affiliated and affiliate as the Act defines "affiliate." *See supra* note 1550.

can be served effectively. The state commission should consider whether the entire market could be served by this switch.[1571] Although a single self-provisioned switch is not sufficient to invoke the mandatory triggers described above, we conclude that the existence of even one such switch might in some cases justify a state finding of no impairment, if it determines that the market can support "multiple, competitive supply."[1572]

(b) Operational Barriers to be Examined

511. As discussed above, state commissions should examine the role of potential operational barriers in determining whether to find "no impairment." In particular, state commissions should examine whether incumbent LEC performance in provisioning loops, difficulties in obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC, and difficulties in obtaining cross-connects in an incumbent's wire center, are making entry uneconomic for competitive LECs. As described above, we find that these factors can raise barriers to entry, but they are not the bases for our national finding of impairment.[1573]

[1571] For example, a mass market switch with relatively high variable costs per customer (*i.e.*, in cases where the cost of acquiring and serving each additional customer is high, excluding the fixed costs of entry and collocation) may be able to serve only high revenue customers in the market economically. These variable costs would be determined by hot cut costs, churn, loop costs, and other customer-acquisition outlays.

[1572] Whether this competitor is using the incumbent's loops or its own loops should bear on how much weight to assign this factor, at least until such time as incumbent loops are no longer required to be unbundled.

[1573] As noted above, we lack sufficient specific evidence concerning whether and where these factors will be significant enough to constitute impairment, particularly after a batch cut process has been implemented. Therefore, as part of its analysis, a state must consider evidence of

512. *Loop Provisioning.* We have found on a national basis that the delays and costs associated with loop provisioning—those specifically arising from the hot cut process—impair a requesting carrier's entry into the mass market. Above, we have directed the state commissions to implement batch cut processes to reduce the economic and operational barriers posed by the present hot cut process. We recognize, though, that even after such processes are implemented, competitive carriers may face barriers associated with loop provisioning—even problems arising from the newly improved hot cut processes—which may continue to impair a requesting carrier's entry into the mass market. We therefore ask the state commissions to consider more granular evidence concerning the incumbent LEC's ability to transfer loops in a timely and reliable manner. Specifically, we ask the states to determine whether incumbent LECs are providing nondiscriminatory access to unbundled loops.[1574] Evidence relevant to this inquiry might include, for example, commercial performance data

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whether operational considerations permit or prevent competitive entry in each market, and, if the latter, whether unbundling would overcome the impairment found. Here, we detail three particular types of operational barriers that may or may not give rise to impairment, even in the presence of a batch cut process.

[1574] In determining whether granular evidence contradicts our finding that the hot cut process imposes an operational barrier, the state commission should review evidence of consistently reliable performance in three areas: (1) Timeliness: percentage of missed installation appointments and order completion interval; (2) Quality: outages and percent of provisioning troubles; and (3) Maintenance and Repair: customer trouble report rate, percentage of missed repair appointments, and percentage of repeat troubles. This review is necessary to ensure that customer loops can be transferred from the incumbent LEC main distribution frame to a competitive LEC collocation as promptly and efficiently as incumbent LECs can transfer customers using unbundled local circuit switching. This evidence will permit states to evaluate whether competitive carriers are impaired because the quality of their services is below that offered by the incumbent.

demonstrating the timeliness and accuracy with which the incumbent LEC performs loop provisioning tasks and the existence of a penalty plan with respect to the applicable metrics. For incumbent LECs that are BOCs subject to the requirements of section 271 of the Act, states may choose to rely on any performance data reports and penalty plans that might have been developed in the context of a past, pending, or planned application for long-distance authority. For other incumbent LECs, the states may choose to minimize the regulatory burden posed by extensive metric reporting and penalty plan requirements by reviewing other forms of evidence. State commissions should also consider whether the incumbent's facilities, human resources, and processes are sufficient to handle adequately the demand for loops, collocation, cross connects, and other services required by competitors for facilities-based entry into the voice market.

513. *Collocation.* As described above, we find that the absence of sufficient collocation space in the incumbent central office or offices might in some markets render competitive entry impossible and thus result in impairment. We therefore direct the state commissions to consider evidence concerning the costs and physical constraints associated with collocation in a particular market. We direct state commissions to consider whether competitive entry is inhibited, or is likely to be inhibited going forward, by the exhaustion of available collocation space in the incumbent LEC's central offices. Evidence relevant to this inquiry would include, for example, the amount of space currently available in those central offices; the expected growth or decline, if any, in the amount of space available; and the expected growth or decline, if any, of requesting carriers' collocation space needs, assuming that access to unbundled switching were curtailed. The state commissions shall consider this factor in determining whether to find that requesting carriers are not impaired without access to unbundled local circuit switching.

514. *Competitive LEC-to-Competitive LEC Cross Connects.* We have also determined that an incumbent LEC's failure to provide cross-connections between the facilities of two competitive LECs on a timely basis can result in impairment. Therefore, a state commission considering whether to find "no impairment" with regard to mass market switching must evaluate whether such delays increase requesting carriers' costs to such a degree that entry into the market is rendered uneconomic in the absence of unbundled switching. Evidence relevant to this inquiry would include, for example, information regarding the incumbent's practices and procedures with regard to provision of cross-connects linking competitive carriers' facilities, competitive LECs' complaints regarding the incumbent's past performance in this area, the incumbent LEC's response to these complaints, the costs incurred in connection with deficient performance in this regard, and the degree to which those costs render entry into a given market uneconomic.

(c) Economic Barriers to be Examined

515. State commissions conducting a review of unbundled switching must next examine whether economic factors associated with the use of competitive switching facilities are preventing competitive entry into the mass market, and, if not, whether it is appropriate to find that requesting carriers are not impaired without access to unbundled circuit switching in any particular market. Competing carriers argue that even using the most efficient network architecture available for entry, the UNE-L strategy, they are at a significant cost disadvantage vis-à-vis the incumbent.[1575] As discussed above,

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[1575] *See* UNE-P Coalition Comments at 44-46; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 3 (noting that switching has high fixed costs that must be spread over a large number of customers if a competing carrier is to achieve cost efficiencies similar to those enjoyed by the incumbent LEC).

these carriers focus on two primary types of costs that only they face: (1) the costs of migrating incumbent LEC loops to their switches; and (2) the costs of backhauling voice circuits to their switches from the end offices serving their customers, which as noted above, include the costs associated with collocation in the incumbent LECs' central offices.[1576]

516. As discussed above, we find that the record does not contain sufficient detail concerning the scope and scale of the barrier posed by the costs associated with migration and backhaul in particular markets to permit us to determine whether and where there may be exceptions to our national finding that competing carriers cannot economically serve the mass market without access to unbundled local switching.[1577] Accordingly, we ask state commissions to examine, on a granular basis, evidence that may demonstrate that requesting carriers are not impaired without access to unbundled local circuit switching.

517. *Evidence of Whether Entry is Economic.* In considering whether a competing carrier could economically serve the market without access to the incumbent's switch, the state commission must also consider the likely revenues and costs associated with local exchange mass market service, as detailed below.[1578] Specifically, state commissions must determine whether entry is likely to be economic utilizing the most efficient network architecture available to an entrant.[1579]

[1576] *See infra* Part VI.D.6.a.(i) (discussing possible economic impairment).

[1577] *See id.*

[1578] *See infra* para. 519.

[1579] Consistent with the impairment standard we adopt today, state commissions must determine whether competitors are unable economically to serve the market. State commissions should not focus on whether competitors operate under a cost disadvantage. State commissions should determine if entry is economic by conducting a business case analysis for an efficient entrant. This involves estimating

While most comments have focused on the UNE-L strategy,[1580] in which a requesting carrier combines the incumbent's loops and transport with its own switch, collocation and backhaul, state commissions must also consider whether new technologies provide a superior means of serving customers. The analysis must be based on the most efficient business model for entry rather than to any particular carrier's business model. Because this analysis involves comparing the potential revenues to the potential costs of entry, a state will necessarily be weighing advantages and disadvantages an entrant has in attempting to serve mass market customers. In judging whether entry is economic, states must also consider how sunk costs and competitive risks affect the likelihood of entry.[1581]

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the likely potential revenues from entry, and subtracting out the likely costs (accounting for scale economies likely to be achieved). We note that for switching, at least, parties have submitted business case analyses to demonstrate the likely profitability of entry. *See* SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter; BellSouth Jan. 30, 2003 *Ex Parte* Letter; *see also* AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter.

[1580] SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter; BellSouth Jan. 30, 2003 *Ex Parte* Letter; AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter; AT&T Oct. 4, 2002 *Ex Parte* Letter; BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter; PACE Dec. 11, 2002 *Ex Parte* Letter.

[1581] We reject the dissenters' "bootstrapping" argument that other UNEs should not be considered in our impairment analysis. *Chairman Powell Statement* at 11-12; *Commissioner Abernathy Statement* at 7-8. First, we note that consideration of these factors only arises where the competitive triggers have not been met. Second, we note that even though nondiscrimination and pricing obligations under section 251(c)(3) and 252 for each individual UNE certainly lower the cost of entry, these provisions do not necessarily establish that they will lower costs sufficiently to make entry economic without access to any one particular element. Even if interconnection and unbundling are performed as efficiently as is technically feasible, these costs must still be considered in our business case analysis to determine whether entry is uneconomic without access to a particular network element.

To illustrate, even if the unbundling of transport significantly lowers the cost of entry, the cost of using unbundled transport (priced at TELRIC) is still a cost that competitors will likely have to incur to provide local exchange service, and should be included in a business case analysis for determining whether entry is economic. Furthermore, to the extent that transport is needed to extend the loops from the subscriber's wire center to the competitor's collocation, that is an additional cost that should be included in a business case analysis. And even if a market would otherwise be capable of sustaining switch deployment, if an incumbent lacked sufficient collocation space, then, the additional cost (including securing building, additional space, power, etc.) should be considered in the business case analysis. Similarly, if competing carriers were unable to cross connect their cages, a competitive voice LEC would not be able to engage in line splitting with a competitive data LEC, reducing its potential revenues. The dissent is incorrect to conclude that this analysis equates calculating a cost for purposes of a business case analysis with "a source of competitive disadvantage." *Chairman Powell Statement* at 12; *see also Commissioner Abernathy Statement* at 8.

The dissents mischaracterize our intention. Unlike in the *UNE Remand Order*, we do not intend that the availability of any UNE at state established wholesale (TELRIC) rates could by itself constitute impairment without considering all costs and revenues in a business case analysis. Rather, we are requiring the states to conduct an analysis of whether entry is economic by comparing the potential revenues to the potential costs of providing a particular service. Mass market switching, in isolation, is not a service and thus cannot be easily evaluated. Instead, to evaluate the feasibility of self-deploying a switch, states should perform a business case analysis of providing local exchange service. As described, the potential revenues include basic service, vertical features, access charges, *see infra* para. 519, revenues beyond just "switching" revenues. Likewise, costs include the forward-looking, TELRIC costs of the other elements necessary to provide local service. *See infra* para. 520. The cost factors listed should not be considered in isolation, but only in the context of a broad business case analysis that examines all likely potential costs and revenues.

Contrary to the dissents' assertions, our determination of whether competitors are impaired without unbundled switching does not depend on, and is not directly related to, whether loops or transport are unbundled. Rather than compelling the unbundling of switching, the fact that such complementary inputs may be available on an unbundled basis serves to lower the cost of providing service and thereby makes facilities-based

518. State commissions should also consider how the existence of universal service payments and implicit support flows will impact competitors' ability to serve the specific market. As discussed in Part V.B.3 above, universal service payments and implicit support flows have been used to ensure the universal availability of local exchange service at affordable rates.[1582] These payments and support flows are

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entry more likely to be economic. Indeed, the alternative to assuming that competitors will use UNEs priced at TELRIC as complementary inputs would be to conduct the business case analysis using the cost of self-provisioning all of the elements necessary to provide local exchange service. Such an analysis, however, would lead to significantly greater unbundling, as the costs of self-providing these elements is likely much higher than obtaining them from the incumbent priced at TELRIC. For example, the cost of self-providing a loop could be extremely high and using that cost in the business case analysis for switching would always lead to a finding of impairment. Thus, we reject such an approach and in our business case analysis consider the minimum cost of entering the market, which includes the wholesale (forward-looking, TELRIC) prices of UNEs purchased from the incumbent LEC that are necessary to provide the relevant service. Moreover, we note that to the extent that incumbent LECs believe that TELRIC prices are too low, as they claim, (*see, e.g.*, BellSouth Comments at 25; Verizon Comments at 32), it should make it easier to satisfy this business case analysis for determining whether switching can be self provisioned in a market.

Chairman Powell also asserts that we improperly considered factors that have "characteristics that are not linked to natural monopoly." *Chairman Powell Statement* at 12. As an initial matter, we note that our switching analysis avoids finding impairment on the basis of "natural monopoly" characteristics associated with elements that are complementary inputs (such as loops), because it assumes competitors will use UNEs purchased at TELRIC rates, where they are available. When we list various cost factors for state commissions to consider in their impairment analysis, we do so only because we determined that they were likely costs of entry, and were therefore relevant to a business case analysis.

[1582] *See infra* Part V.B.3. Section 254 of the 1996 Act requires that federal support mechanisms be "explicit and sufficient to achieve the purposes of this section", and should be based on a set of principles enumerated in section 254(b), including the principle that consumers in

likely to affect whether entry is economic, and therefore our impairment standard requires that they be taken into consideration. Particularly significant is the fact that implicit support flows have been incorporated into retail rates, such that retail rates for particular services may vary significantly from the cost of providing those services. State commissions should consider how competitors' ability to serve the market is facilitated in those areas where rates are "above cost," and is impeded where rates are "below cost," while recognizing that rates are likely to change over time in response to competition.[1583]

519. *Potential Revenues.* In determining the likely revenues available to a competing carrier in a given market, the state commission must consider *all* revenues that will derive from service to the mass market, based on the most efficient business model for entry. These potential revenues include those associated with providing voice services, including (but not restricted to) the basic retail price charged to the customer, the sale of vertical features, universal service payments, access charges, subscriber line charges, and, if any,

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rural and high-cost areas should have access to telecommunications services at rates that are reasonably comparable to those charged in urban areas. 47 U.S.C. § 254(b). Section 254(f) permits states to adopt regulations "to preserve and advance universal service within that [s]tate," provided that these regulations are "not inconsistent with the Commission's rules to preserve and advance universal service." 47 U.S.C. § 254(f). States may also adopt regulations providing additional definitions and standards to promote universal service, but only to the extent that "such regulations adopt additional specific, predictable, and sufficient mechanisms to support such definitions or standards that do not rely on or burden Federal universal service support mechanisms." *Id.*

[1583] As discussed above in Part V.B.3., to the extent that unbundling tends to create pressures to reduce or eliminate these implicit support flows, we note that the states may choose to rebalance rates, adopt an explicit and portable support mechanism, and/or exempt rural and small incumbent LECs from unbundling obligations as provided in section 251(f)(1) of the Act.

toll revenues.[1584] The state must also consider the revenues a competitor is likely to obtain from using its facilities for

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[1584] *See, e.g.*, Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3, 11 (filed Sept. 25, 2002) (AT&T Sept. 25, 2002 *Ex Parte* Letter); SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter. The dissents' claim that considering, in the impairment analysis, retail rates that are low as a result of implicit universal service subsidies will "perpetuate reliance on UNE-P" is wrong. To begin with, our analysis considers such rates only if the triggers are not met. Moreover, the dissenters voted to approve an impairment analysis that specifically takes such rates into account. As mentioned, our general impairment standard—which Chairman Powell proposed and the Commission voted unanimously to approve—asks "whether all potential revenues from entering a market exceed the costs of entry, taking into account consideration of any counterveiling advantages that a new entrant may have." *See supra* para. 84. This analysis requires examination of "prices," *see supra* para. 85, which, as the Order states in a section proposed by Chairman Powell and approved unanimously by the full Commission, may be low as a result of implicit universal service subsidies. *See supra* para. 164 ("[T]he impairment standard adopted by the Commission and reflected in the more granular state commission proceedings mandated by this Order addresses the existence of implicit support flows in several ways. . . . Our impairment standard . . . provides for consideration of whether entry is economic by taking into account the potential revenue opportunities available."). In the same section, again proposed by Chairman Powell and approved unanimously by the full Commission, we explicitly "recognize that 'below-cost' local exchange rates will tend to discourage competitive facilities-based entry, and the absence of such entry will be considered as evidence of impairment." *See supra* para. 168. As Chairman Powell and Commissioner Abernathy agreed, however, consideration of such evidence will not "perpetuate reliance" on UNEs. Specifically, facilities-based competitive entry may still occur because "new entrants using alternative technologies may have lower costs than the incumbent LEC even when UNE rates are set at reasonable levels" and because "[o]ur impairment standard also provides for consideration of evidence concerning the full range of revenue opportunities available" such as "premium" services "attractive to customers even when priced well above the incumbent LEC's rate for local exchange service." *See supra* para. 168 & n.543. Competing carriers can also gain access to the same universal service subsidies

providing data and long distance services and from serving business customers.[1585] Moreover, state commissions must consider the impact of implicit support flows and universal service subsidies on the revenue opportunities available to competitors. Consideration of potential revenues is consistent with our standard, as described in Part V above, and with the guidance of the *USTA* decision.[1586]

520. *Potential Costs*. Similarly, the state must consider all factors affecting the costs faced by a competitor providing local exchange service to the mass market.[1587] If the state

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available to incumbent carriers by applying for "eligible telecommunications carrier" status. 47 U.S.C. § 214(e)(6); *see also* 47 U.S.C. § 254(e). These subsidies should encourage entry and, even where our deployment triggers are not met, the availability of the subsidies must be taken into account in determining whether entry is uneconomic. In addition, "the statute contains an exemption from the unbundling requirements for rural carriers and provides for state modification or suspension of the unbundling requirements for incumbent carriers serving, in the aggregate, less than two percent of the nation's access lines." *Id.*

[1585] This analysis will therefore take into account the scale and scope economies available to carriers using existing facilities to provide a variety of services to all customers that are likely to be served by an efficient entrant.

[1586] The *USTA* decision expressed concern that in some markets incumbent LECs' prices were above cost, and that the Commission failed to take this gap, and the advantage it conferred on competitors, into consideration in its impairment analysis in the *Local Competition Order*. *USTA*, 290 F.3d at 422-23. As discussed in Part V.B.3. (discussion of implicit support flows) *supra*, our standard, involving a granular analysis examining both the cost and revenues associated with entry, automatically incorporates competitive LECs' advantages such as these, and therefore addresses the *USTA* decision's concern about these situations.

[1587] The dissents argue that any consideration of the same factors that were considered in the *UNE Remand Order* is impermissible according to the *USTA* decision. *Chairman Powell Statement* at 11 n.30; *Commissioner Abernathy Statement* at 6 n.16. The use of factors common to the *UNE Remand Order* is beside the point. In this Order, we have fundamentally changed the formula (*i.e.*, the unbundling framework and

standard) by which we consider these factors. Thus, as stated above and unlike in the *UNE Remand Order*, they may play a role in our analysis, but are not individually dispositive of an impairment determination. *See supra* para. 106 ("While we no longer rely on, or formally examine, the five UNE Remand factors as a basis for our analysis of impairment, these factors still play a role in our analysis as they relate to the barriers to entry we have identified above."). Moreover, the dissents' claims that the factors we require states to examine as part of their granular inquiries are inconsistent with the *USTA* decision are wrong. *Chairman Powell Statement* at 9-11; *Commissioner Abernathy Statement* at 6 n.16. Their arguments are predicated upon a mischaracterization of *USTA* and are inconsistent with the Commission's decision in other sections of this Order that they have affirmatively supported.

For example, the dissents argue that the switching analysis relies on costs that are merely ordinary start-up costs and that these costs may not be taken into account under *USTA*. *Chairman Powell Statement* at 9; *Commissioner Abernathy Statement* at 7-8. As an initial matter, we note that these costs are only considered if the automatic triggers are not met. Moreover, although the Commission's switching analysis requires the states to examine certain factors that may contribute to the start-up costs of a new entrant, this is not the end of the inquiry. Consistent with the unbundling analysis applied in the rest of the Order and the guidance from *USTA*, we have examined these costs to determine whether, as balanced against the potential revenues that may be achieved, they are *sufficiently large* to prevent entry. That is, the inquiry we adopt today considers whether, after weighing all the costs associated with entry against the potential revenues and offsetting advantages, entry into the market is economic. A cost disparity that is typical of, and has not prevented, entry into the industry is insufficient to justify impairment under our standard. With respect to the factors themselves, there is general agreement in the record that the relevant start-up costs associated with entry into the local market include purchasing collocation, transmission equipment, transport, and loops. Indeed, in the cost studies submitted by the BOCs themselves they largely utilize the very same factors that we require the states to consider. *USTA* did not require us to ignore the costs associated with these factors; rather, the court directed us to set a higher threshold for determining when these costs, considered cumulatively, are sufficiently large as to create impairment. While any single cost factor may appear to be a small hindrance, it is only by considering the cumulative effect of all cost factors that the total potential hindrance to entry can be fully evaluated.

Notably, in criticizing our switching analysis, the dissents appear to attack the very impairment standard that they proposed, voted for, and applied to the Commission's analysis of transport and loops—other sections of the Order that they affirmatively supported. For example, Chairman Powell complains that "the Majority's switching decision conflates an impairment standard that properly asks whether entry is 'uneconomic' with the question of whether entry is profitable." *Chairman Powell Statement* at 14. We are at a loss to understand his complaint. The switching section in no way states a requirement to consider "profitability"—that is discussed in the general impairment section which was proposed by Chairman Powell and adopted unanimously by the Commission. The general impairment standard that Chairman Powell proposed and the Commission adopts unanimously asks "whether all potential revenues from entering a market exceed the costs of entry, taking into account consideration of any countervailing advantages that a new entrant may have." *See supra* para. 84. Furthermore, the general impairment section makes clear, in a passage proposed by Chairman Powell and adopted unanimously, that this analysis "is based on determining whether entry would be *profitable* without the UNE in question." *See supra* para. 85 (emphasis added). We merely ask whether entry is economic, and it is Chairman Powell that engages in bootstrapping, criticizing the very standard that he has proposed we consider.

Similarly, Chairman Powell claims that applying in the switching section the impairment standard he proposed and the Commission unanimously adopted "has converted the impairment standard into a protector of individual business plans." *Chairman Powell Statement* at 11. The Order's general impairment section, which again was proposed by Chairman Powell and adopted unanimously, devotes an entire paragraph to explaining why our impairment analysis does not entail assessing individual business plans. That paragraph—entitled "Impairment of Individual Requesting Carriers or Carriers Pursuing a Particular Business Strategy" states that "[w]e will not, as some commenters urge, evaluate whether individual requesting carriers or carriers that pursue a particular business strategy are impaired without access to UNEs." *See supra* para. 115. Rather, we explain, "an entrant is not impaired if it could serve the market in an economic fashion using its own facilities, concerning the range of customers that could reasonably be served and the services that could reasonably be provided with those facilities." *Id.* This same analysis applies in the switching section no less than it does in the other sections of this Order. *See supra* note 1579 (stating that "[t]he business

case analysis pertains to "an efficient entrant" and an estimation of the "likely potential revenues" and the "likely costs").

Chairman Powell claims that "the Majority directs states to consider whether price and revenue reductions that result from additional competitive entrants can form the basis of impairment." *Chairman Powell Statement* at 13. This is simply false, as we do not direct states to consider any such thing. While we recognize that an academically pure interpretation of the impairment standard proposed by Chairman Powell and adopted unanimously in this item might take such reductions into account, we agree with Chairman Powell that a more administratively practicable approach would be to consider prevailing prices and revenues. Accordingly, we expect states to consider prices and revenues prevailing at the time of their analyses. We believe that these are reasonable proxies for likely prices and revenues after competitive entry and will result in a more administrable standard.

Finally, Chairman Powell maintains that our switching analysis "ignores the fact that the rates for collocation and hot cuts as well as other UNEs, are not within the control of the incumbent LEC and therefore are not cognizable under section 251(d)(2)." *Chairman Powell Statement* at 12. This claim is doubly wrong. First, each of these factors is within the incumbent LEC's control. The statute is clear that incumbent LECs are free to negotiate rates for UNEs, hot cuts, and collocation irrespective of statutory standards. *See* 47 U.S.C. § 252(a) ("[A]n incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251."). Second, to the extent that these factors are impacted by forces beyond the incumbent LEC's control—for example, to negotiate UNE rates, an incumbent LEC must come to an agreement with a requesting carrier—there is no basis whatsoever for Chairman Powell's claim that they "are not cognizable under section 251(d)(2)." The text of the section 251(d)(2) does not mention or in any way suggest such a limitation. *See* 47 U.S.C. § 251(d)(2) ("In determining what network elements should be made available . . ., the Commission shall consider, at a minimum, whether . . . the failure to provide access to such network element would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer."). And the impairment standard proposed by Chairman Powell and adopted unanimously by the Commission requires consideration of "the costs of entry," which necessarily includes some factors entirely beyond the incumbent LEC's control. *See supra* para. 84. Indeed, with respect to high-capacity loop facilities, the

commission determines that a UNE-L strategy is the most efficient means of serving the customer, these costs would likely include (among others):[1588] the cost of purchasing and installing a switch;[1589] the recurring and non-recurring charges paid to the incumbent LEC for loops, collocations, transport, hot cuts, OSS, signaling, and other services and equipment necessary to access the loop;[1590] the cost of collocation and equipment necessary to serve local exchange customers in a wire center, taking into consideration an entrant's likely market share, the scale economies inherent to serving a wire center, and the line density of the wire center;[1591] the cost of

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Chairman proposed and the Commission unanimously approved consideration of multiple criteria outside the control of incumbent LECs, including. among other things, "local topography such as hills and rivers," "availability of reasonable access to rights-of-way," and "building access restrictions/costs." *See supra* para. 335; *see also id.* at para. 410 (listing similar criteria for transport).

[1588] Note that these costs are likely to be affected by whether the entrant is using the same facilities to serve customers in other markets, thus taking advantage of available scale and scope economies. Thus, a portion of the costs may be paid for by revenues generated in other markets, and the full cost should not be attributed to serving just one market. For example, it would be unreasonable to assume that the cost of developing a complete OSS system would have to be recovered within a single granular market. Also, if it is determined that an efficient entrant could efficiently serve both enterprise and mass market customers with the same switch, collocation and transport facilities, then the state's analysis of mass market customers in a particular market should not assume that the entire cost of these facilities is borne by these customers.

[1589] Granite Dec. 16, 2002 *Ex Parte* Letter.

[1590] SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter; BellSouth Jan. 30, 2003 *Ex Parte* Letter; AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter; ASCENT Comments at 36; ASCENT Reply at 7; BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 4.

[1591] New South Reply at 25-26; NewSouth Fury Reply Aff. at para. 4; AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter; BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 4.

backhauling the local traffic to the competitor's switch;[1592] other costs associated with transferring the customer's service over to the competitor; the impact of churn on the cost of customer acquisitions;[1593] the cost of maintenance, operations, and other administrative activities;[1594] and the competitors' capital costs.[1595] State commissions should pay particular attention to the impact of migration and backhaul costs on competitors' ability to serve the market. We also note that parties to this proceeding have placed evidence in the record that economic impairment may be especially likely in wire centers below a specific line density.[1596] Before finding "no

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[1592] The state commission should consider whether EELs or digital loop carrier remote terminals are the most effective means for a competitor to backhaul the traffic to its switch.

[1593] WorldCom Nov. 15, 2002 Customer Churn *Ex Parte* Letter; BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter at 4.

[1594] *See, e.g.*, BellSouth Jan. 30, 2003 *Ex Parte* Letter at 7; *see also* AT&T Feb. 4, 2003 UNE-L Cost Impairment *Ex Parte* Letter at 10.

[1595] These include the capital carrying costs for the period it takes a competitor to set up operations and achieve profitability. AT&T Feb. 4, 2003 UNE-L Cost Impairment *Ex Parte* Letter at 2, 10. Some of the costs listed here are unlikely to constitute by themselves a barrier to entry, particularly if the incumbent incurs the same costs for the provisioning of its retail service. A state commission should take them into consideration in performing a business case analysis, which requires consideration of all likely revenues and costs.

[1596] SBC and BellSouth have presented studies to show that competitors using their own switches should be able to earn a positive profit in wire centers serving at least 5,000 lines. SBC Jan. 14, 2003 Unbundled Switching *Ex Parte* Letter; BellSouth Jan. 30, 2003 *Ex Parte* Letter. WorldCom and AT&T provided studies to show that a competitor would operate under a significant cost disadvantage, and that this disadvantage is larger in small wire centers. AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter. WorldCom claims that its cost study shows that in central offices with fewer than 25,000 residential lines, the cost of UNE-L will constitute an insurmountable barrier to entry and competition, even if there are significant reductions in incumbent LEC charges. In central offices

impairment" in a particular market, therefore, state commissions must consider whether entrants are likely to achieve sufficient volume of sales within each wire center, and in the entire area served by the entrant's switch, to obtain the scale economies needed to compete with the incumbent.[1597]

(c) Baseline Rolling Use of Unbundled Switching for Customer Acquisition Purposes

521. If, after applying the triggers and the flexible analysis of potential deployment described above, a state commission concurs that requesting carriers are impaired in the mass market in any particular market, we conclude that it must next consider the use of "rolling access to unbundled local circuit switching" to address impairment in that market. Specifically, we conclude that, in some cases, impairment in a given market could be mitigated by granting requesting carriers access to unbundled local circuit switching for a temporary period, permitting carriers first to acquire customers using unbundled incumbent LEC local circuit switching and later to migrate these customers to the competitive LECs' own switching facilities.[1598] As set forth

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serving 25,000 or more residential lines, competitive LECs that achieve a reasonable market share (*e.g.*, 7%) can profitably migrate customers served by unbundled loops combined with unbundled local circuit switching to their own switches, provided that state commissions ensure that operational and economic barriers are substantially reduced or removed. WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 7.

[1597] BiznessOnline.Com Feb. 14, 2003 *Ex Parte* Letter; PACE Dec. 11, 2002 *Ex Parte* Letter at 5-10; AT&T Jan. 17, 2003 *Ex Parte* Letter; WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter; AT&T Oct. 4, 2002 Comparing ILEC and CLEC Local Network Architectures *Ex Parte* Letter.

[1598] We refer to this as "rolling use" because under such a framework, each competitive LEC would obtain limited access to unbundled local circuit switching on a customer-by-customer basis.

below, we conclude that where transitional access to unbundled switching would cure any impairment that would otherwise undermine competition if requesting carriers were denied access to unbundled local circuit switching, the state must implement such "rolling" access rather than perpetuating permanent access to the switching element.[1599]

522. We note at the outset that in at least some cases, "rolling" access to unbundled local circuit switching could adequately address certain barriers to entry associated with

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[1599] Chairman Powell claims that our impairment test for switching is "unworkable." *Chairman Powell Statement* at 13. To the extent the impairment test for switching is not simple, however, it is because the facts surrounding impairment are not simple. For example, hot cut processes and the charges for them often vary substantially between states. Revenue potential also varies dramatically, as retail rates can vary between states, by the type of customer, and within the state. In order to conduct a granular analysis of the type called for by the D.C. Circuit, it is necessary to take these variations into account. Indeed, in the past, Chairman Powell has argued that such geographic variations and "complicated" factors must be taken into account. *See Commissioner Powell Second NPRM Statement*, 14 FCC Rcd at 8720-21 ("The availability of elements outside the incumbent's network could potentially turn on many factors, such as the existence of vendors and distribution channels, the presence of competing facilities-based LECs and the price of non-incumbent elements relative to the requesting competitor's ability to pay. These factors are likely to vary significantly from one market to the next . . . . It follows directly, then, that assessments of whether an element is necessary to provide service or whether failing to mandate access to that element would impair a new entrant's ability to provides service will vary significantly among different markets, states, and regions."). While a more simple solution would have been to find impairment or—as Chairman Powell would have found—no impairment nationwide, this approach would not have been responsive to the statute, the court, or the record in this case. Moreover, the enterprise loop analysis delegated to the states is arguably even more complicated as it requires the states to conduct a location-specific review on an individual customer-by-customer basis. *See supra* para. 328. Similarly, the transport analysis requires a route-by-route review. Again, both Chairman Powell and Commissioner Abernathy support these more complicated analyses.

the switching element. First, competitive LECs may face difficulties in accumulating enough customers to justify batch line migration processing in both new central offices and existing collocations. Because the evidence in the record demonstrates that the provisioning delays caused by the manual hot cut process may place new entrants at a significant competitive disadvantage relative to the incumbent LECs, which are able to offer service to customers immediately after they receive a customer's order,[1600] we find that the availability of unbundled local circuit switching—even on a temporary basis—may enable competitors to acquire customers, aggregate them, and migrate them to the carrier's own switch in a manner that would not be feasible if the customers each had to be migrated individually upon signing up with the competitive LEC.

523. Second, rolling access to unbundled local circuit switching might satisfactorily address barriers associated with high customer turnover.[1601] Competitive LECs contend that high churn rates render them unable fully to recover the high non-recurring costs associated with the provision of UNE-L service to end users, because such costs are generally recovered on an amortized basis.[1602] We find that transitional access to unbundled local circuit switching could mitigate some of the costs related to customer churn. Such rolling

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[1600] As discussed above, the manual nature of the hot cut process, which requires coordination between competitive LEC and incumbent LEC technicians in a central office, takes a significant period of time. *See* WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 5. CompTel contends that the provisioning interval for lines served by unbundled loops combined with unbundled local circuit switching is, on average, 1-3 days where the corresponding average interval for an unbundled loop is five to six days. CompTel/PACE Oct. 31, 2002 *Ex Parte* Letter at 3.

[1601] WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 6.

[1602] *See, e.g.*, WorldCom Comments at 34 ("Customers may migrate away from the CLEC before the CLEC recovers installation and non-recurring costs."); Z-Tel Reply at 28-29.

access would allow the competitive LEC to incur the non-recurring costs associated with UNE-L service only *after* it had served the end user in question for some time. Given the record evidence that churn is most frequent in the first few months after the customer switches to a new carrier,[1603] rolling access to unbundled switching could eliminate a substantial portion of the non-recurring costs for which competitive LECs would otherwise have gone uncompensated.

524. In light of the prospect that rolling access to unbundled local circuit switching could permit requesting carriers to compete when they otherwise would have been impaired without access to the switching element, we require states to consider and to mandate such rolling access when appropriate, as described here. When a state commission finds that requesting carriers would be impaired in a particular market without access to unbundled local circuit switching, it must next determine whether granting such carriers rolling access to the switching element for a transitional period of 90 days or more would address the impairment found.[1604] We conclude that in such cases, the

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[1603] WorldCom Nov. 15, 2002 Customer Churn *Ex Parte* Letter. As noted above, WorldCom estimates that it loses about 50% of all new customers within the first three months of service. For customers that choose its "Neighborhood" bundled local and long distance products, WorldCom loses, on average, 25% of its customers within 3 months. *Id.*

[1604] We recognize that the record includes support for a wide range of potential customer acquisition periods. WorldCom argues that, because of the high customer turnover, unbundled local circuit switching must not only be available for acquisition of new customers, but also remain available for each new customer for six months after acquisition. WorldCom Jan. 8, 2003 Switching *Ex Parte* Letter at 6. According to Talk America, competitive LECs must still be able to acquire customers using unbundled local circuit switching for 18 months to achieve sufficient numbers for lines for batch migration; to acquire customers in non-collocated locations to build toward density triggers; and to acquire and serve customers who have both on-net and off-net locations. Letter from Heather Gold, Counsel for Talk America *et al.*, to Marlene H.

narrow rolling access approach is more appropriate than an approach requiring continued open-ended unbundled access to the switching element. Thus, where the impairment is due primarily or exclusively to the problems associated with the economies of scale, the churn problem, or other issues that would be addressed by rolling access to unbundled local circuit switching, we ask the state commission to implement such a transitional access period for requesting carriers. That transitional period shall be no shorter than 90 days, though the state commissions may determine that a longer period is appropriate, and permit rolling access to unbundled local circuit switching for a period of more than 90 days.[1605]

(d) Transition Rules

525. To minimize potential service disruptions that could occur from the changes that we adopt today regarding local circuit switching, we retain the four-line "carve-out" from the unbundled local circuit switching obligation on an interim basis,[1606] pending state commission determinations pursuant to

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Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 4 (filed Dec. 17, 2002) (Talk America *et al.* Dec. 17, 2002 *Ex Parte* Letter). We choose a 90-day period here because the evidence in this proceeding suggests that a substantial portion of churn occurs within the first three months of service, and because the 90 day period allows competitive LECs significant opportunities to accumulate enough end users to justify a batch hot cut. *See, e.g.*, WorldCom Nov. 15, 2002 Customer Churn *Ex Parte* Letter.

[1605] As described in the following section, a state determination to require rolling access to unbundled switching—like a state determination to require open-ended access to the switching element—is subject to modification during a state commission's subsequent review.

[1606] We find that we have the authority to retain the four-line carve out, especially in light of case law suggesting that agencies are given additional deference for "interim" or "transitional" mechanisms. *See, e.g.*, *CompTel*,117 F.3d at 1068 (stating that although temporary agency rules are subject to judicial review notwithstanding their transitory nature, substantial deference by courts is accorded to an agency when the issue concerns interim relief); *CompTel*, 87 F.3d at 531; *MCI*, 750 F.2d at 140.

the framework set forth above. In the *UNE Remand Order*, the Commission determined that incumbent LECs are not obligated to provide unbundled local circuit switching to requesting carriers for serving customers with four or more DS0 loops in density zone one of the top fifty MSAs.[1607] If we were not to retain the carve-out, carriers could potentially accumulate more multi-line DS0 customers while states pursued their inquiries, only to risk losing those customers after states make their determinations pursuant to the framework described above. This inquiry will likely limit any multi-line DS0 unbundling obligation—either through the detailed review described in the preceding sections, or through a state determination of the appropriate cut-off for multi-line DS0 customers (*i.e.*, the point at which it makes economic sense for a multi-line customer to be served via a DS1 loop).[1608] By extending the four-line carve-out on an interim basis, pending such state commission action, we seek to avoid service disruptions that may result from expanding

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[1607] 47 C.F.R. § 51.319(c)(2); *UNE Remand Order*, 15 FCC Rcd at 3822-31, paras. 276-98. We note that the Commission, in the *UNE Remand Order*, had also required incumbent LECs subject to the switching carve-out rule to provide new EEL combinations. This aspect of the rule has become moot in light of the Supreme Court's ruling in *Verizon*. *See Verizon*, 535 U.S. at 531-38. Thus, we dismiss as moot Intermedia's petition for clarification of the carve-out's EELs requirements. *See* Intermedia Communications, Inc. Petition for Reconsideration and Clarification, in *Implementation of the Local Competition Provisions of the of the Telecommunications Act of 1996*, CC Docket No. 96-98 at 15-17 (filed Feb. 17, 2000) (Intermedia Feb. 17, 2000 Petition for Reconsideration).

[1608] *See supra* para. 497. We expect that in those areas where the switching carve-out was applicable (*i.e.*, density zone 1 of the top 50 MSAs), the appropriate cutoff will be four lines absent significant evidence to the contrary. *See id.*

and then possibly reducing the eligibility for local circuit switching in this manner.[1609]

(e) Continuing Review

526. We emphasize that the framework set forth here contemplates ongoing state review of the status of unbundled switching. The operational and economic factors governing the analysis we have described are unlikely to remain constant as technology advances, customer needs change, and the competitive market for local service continues to mature. Therefore, after completion of the initial review described here, we expect states to conduct further granular reviews, pursuant to the procedures the state adopts, to reevaluate whether competitive LECs are impaired without access to unbundled local circuit switching, and whether such impairment, if found, could be cured by rolling access to such facilities. Like the initial proceeding, these further reviews might result in a state conclusion that requesting carriers are impaired in a particular market without access to unbundled local circuit switching, that carriers are *not* impaired, or that carriers *would be* impaired but for the availability of rolling access to such facilities. Where a state finds, applying the standards set forth above, that requesting carriers are no

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[1609] We therefore reject arguments that we establish a national carve-out. *See, e.g.*, NewSouth Reply at 30; Z-Tel Comments at 52-54 & n.113; WorldCom Reply at 159-61; BellSouth Reply at 23. Because we retain the carve-out only on a transitional basis, and ask the states to establish an appropriate multiline DS0 cut-off point as part of their more granular review, we dismiss as moot the various requests before the Commission to reconsider and clarify the carve-out's terms. *See* Verizon Feb. 17, 2000 Petition for Reconsideration at 7-11; CompTel Feb. 17, 2000 Petition for Reconsideration at 2-5; Telecommunications Resellers Association Petition for Reconsideration, CC Docket No. 96-98 at 1-11 (filed Feb. 17, 2000); MCI WorldCom Feb. 17, 2000 Petition for Reconsideration at 20-23; AT&T Feb. 17, 2000 Petition for Reconsideration at 12-19; Birch Petition for Partial Reconsideration, CC Docket No. 96-98 at 1-9 (filed Feb. 17, 2000); Sprint Petition for Reconsideration and Clarification, CC Docket No. 96-98 at 7-9 (filed Feb. 17, 2000).

longer impaired without unbundled access to circuit switching, it shall reverse its previous decision that such access is required under section 251(c)(3). The proceedings described in this paragraph shall be completed within six months of the filing of a petition or other pleading submitted in accordance with the prescribed state procedures.[1610]

(f) State Commission Failure to Act

527. For the mass market, state commissions will conduct their initial reviews, applying the triggers and factors discussed above,[1611] within nine months of the effective date of this Order. The incumbent LEC must continue providing unbundled circuit switching in all locations until a state commission completes its proceedings. To the extent that a state commission fails to complete the granular inquiry,[1612] any aggrieved party may file a petition with this Commission demonstrating a state's failure to act pursuant to the procedures we outline today.[1613] Moreover, should a state commission fail to approve a batch cut migration process or provide a detailed explanation why such a process is not necessary within nine months of this Order's effective date, any aggrieved party will be permitted to initiate a proceeding

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[1610] *See supra* note 1291.

[1611] This includes the state commissions' approval of a batch cut migration process or, in the alternative, the provision of a detailed explanation why such a process is not necessary within nine months of this Order's effective date.

[1612] By "complete," we mean that a state commission, upon receiving sufficient evidence, has an affirmative obligation to review the relevant evidence associated with any market submitted by an interested party, and to apply the trigger and any other analysis specified in this Part to such evidence.

[1613] As discussed above, if a state fails to act, we set forth procedures for the Commission to step into the role of the state. *See supra* Part V.E.2. (discussing the role of the states).

with this Commission.[1614] The incumbent LEC must continue providing unbundled local circuit switching, subject to the four-line carve-out described above,[1615] while such a petition is pending with this Commission.

7. Transition of the Embedded Customer Base

528. We recognize the need to establish a transition plan to migrate the embedded unbundled local circuit switching customer base to an alternative service arrangement when unbundled local circuit switching is no longer made available. We find that we have the authority to establish such a plan because whether competing carriers can deploy facilities in a timely fashion is a key consideration in determining whether there is impairment. In instances when existing network elements may potentially be eliminated pending a fact-intensive investigation, we find that section 251(d)(2) gives us authority to promulgate reasonable transition rules to protect the public interest by preserving the status quo pending the outcome of the investigation and by giving competitive carriers a realistic opportunity to deploy their own facilities.[1616] Because the record contains a wide range of proposals that, in many respects, do not on their own account fully for the interests of all stakeholders involved, we further recognize a need to exercise discretion in establishing the specific parameters for the transition plan. Our exercise of discretion is one that inherently resists mathematical precision, calling on us instead to make reasonable judgments based on a totality of competing factors.

[1614] *See id.*

[1615] *See supra* para. 525.

[1616] *See* Letter from Jay Bennett, Executive Director—Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 5-7 (filed Nov. 19, 2002) (SBC Nov. 19, 2002 *Ex Parte* Letter).

529. The most critical aspect of any industry-wide transition plan is to avoid significant disruption to the existing customer base served via unbundled local circuit switching so that consumers will continue to have access to their telecommunications service. The record reflects that, by the end of 2002, more than ten million residential and small business lines were being served by competitive LECs via unbundled local circuit switching arrangements.[1617] We agree with carriers on the need to establish quantifiable milestones to ensure the transition takes place in an orderly manner.[1618] We recognize that eliminating unbundled access to incumbent LEC switching on a flash cut basis could substantially disrupt the business plans of some competitors. This is especially unacceptable, given that the record contains substantial evidence—including cost studies submitted by the incumbent LECs themselves—that competitive carriers suffer cost disadvantages and other barriers when they self-deploy switching in some locations.[1619] There is also a need for an orderly transition to afford sufficient time for carriers to implement any necessary business and operational plans and practices to account for the changed regulatory environment, including the need to modify or revise their interconnection agreements. For example, competitive LECs may need to develop new UNE-L provisioning systems, including hiring, training, and equipping loop provisioning and switch technicians; purchase and collocate new equipment; create additional customer service and trouble maintenance groups; revise wholesale billing systems; and develop capabilities for

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[1617] PACE Jan. 14, 2002 *Ex Parte* Letter at 2.

[1618] SBC Reply at 112.

[1619] Letter from Jay Bennett, Executive Director—Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338, Attach. *Residential Customers Can Be Profitably Served Using UNE-L* at 2 (filed Jan. 24, 2003) (SBC Jan. 24, 2003 *Ex Parte* Letter); *see also* BellSouth Jan. 24, 2003 *Ex Parte* Letter at 12.

E911 and local number portability.[1620] Moreover, our transition plan must require the incumbent LEC to unbundle its local circuit switching facilities for some limited period *after* a state commission has found "no impairment," because otherwise a competitive LEC would be forced to halt its advertising and customer acquisition activities between the time the state commission issued its findings and the time the competitive LEC was able to serve its customers using alternative facilities. Finally, our plan must ensure that, as a practical matter, the transition occurs in a timely manner. We balance these important considerations against the reality that it would frustrate the statutory scheme and the court's conclusion that impairment is the "touchstone" of our unbundling decision if customers are not transitioned from required unbundled switching as expeditiously as possible.

530. The parties take diverging positions regarding a transition from unbundled switching to facilities-based service (*i.e.*, UNE-L or resale).[1621] Incumbent LECs generally support elimination of their obligation to unbundle local

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[1620] *See, e.g.*, WorldCom Nov. 18, 2002 Transition to UNE-L *Ex Parte* Letter at 4.

[1621] SBC, for example, offers a proposal with respect to customers served by unbundled loops combined with unbundled local circuit switching, which relies on the establishment of a national two-year transitional wholesale offering for serving residential customers that is functionally equivalent to such an arrangement at a rate of $26 per month. *See* SBC Nov. 19, 2002 *Ex Parte* Letter at 5. Under SBC's proposal, resale and UNE-L options would remain available for competitive LECs to serve the mass market. Several competitive LECs propose migration from unbundled switching to competitive LEC-owned switching over time based on ensuring that competitive LECs migrate to their own switching platform as self-provisioned switching becomes technically and economically feasible. *See* Letter from Heather B. Gold, Representative for Broadview, Talk America, and Eschelon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Jan. 2, 2003) (Broadview *et al.* Jan. 2, 2003 Unbundled Switching to Unbundled Loop Proposed Migration *Ex Parte* Letter).

circuit switching and propose transition plans away from unbundled incumbent LEC local circuit switching.[1622] Competitive LECs generally oppose the incumbent LEC transition proposals and argue that the Commission should not establish triggers to transition away from incumbent LEC unbundled local circuit switching. In several *ex parte* presentations, a number of parties softened their initial positions and proposed narrowly tailored transition proposals towards promoting facilities-based competition. For example, incumbent LECs propose transition plans based on a finding

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[1622] *See* Verizon Oct. 16, 2002 *Ex Parte* Letter at 18; Verizon Jan. 10, 2003 *Ex Parte* Letter at 2 (stating that if the Commission chooses to adopt a transition plan for residential customers, an appropriate transition would be one that moves quickly to the resale price prescribed by Congress). According to Verizon, the Commission should transition the residential rates for access to unbundled loops combined with unbundled local circuit switching to the state-established resale rate over a 12-month period. *See* Verizon Jan. 10, 2003 *Ex Parte* Letter at 2. One-third of the differential would be eliminated immediately, as of the date of the Commission's Order. *Id.* Another third would be eliminated after six months. *Id.* At the end of the 12-month period, the residential rates for access to unbundled loops combined with unbundled local circuit switching would be the resale rate. *Id.* at 2-3. Verizon further recommends that these transitional rates apply to the embedded base of residential customers served by unbundled loops combined with unbundled local circuit switching as well as any new customers added for the first six months after the Commission's Order. *Id.* Qwest's plan, for example, would require the following: (1) Day 60—Competitive LECs would declare its preferred transition option; (2) As soon as possible—Transition existing customers served by unbundled loops combined with unbundled local circuit switching to Resale or Unbundled Switching; (3) August 2003—Transition existing customers served by unbundled loops combined with unbundled local circuit switching to new market-based product offering from Qwest; and (4) December 2003—Transition existing customers served by unbundled loops combined with unbundled local circuit switching to stand-alone loops on a negotiated project basis. *See* Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, Attach. at 2 (filed Oct. 30, 2002) (Qwest Oct. 30, 2002 Switching *Ex Parte* Letter).

of no impairment for all customer classes. Several competitive LECs propose migration from unbundled switching to competitive LEC-owned switching over time based on ensuring that competitive LECs migrate to their own switching platform as self-provisioned switching becomes technically and economically feasible, with all proposals envisioning substantial state involvement to administer the phase-out.[1623] For example, Broadview, Eschelon, and Talk America propose a four-step migration plan, which requires incumbent LECs to create efficient loop provisioning processes for hot cutting unbundled loops combined with unbundled local circuit switching to unbundled stand-alone loops migration once competitive LECs exceed prescribed line densities.[1624] Z-Tel details a five-step plan for building wholesale switching and transport alternatives, which, it contends, will support the entry of several telecommuni-

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[1623] Broadview *et al.* Jan. 2, 2003 Unbundled Switching to Unbundled Loop Proposed Migration *Ex Parte* Letter; Letter from Heather B. Gold, Counsel for Broadview, Talk America, and Eschelon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 2 (filed Dec. 31, 2002) (Broadview *et al.* Dec. 31, 2002 *Ex Parte* Letter).

[1624] Broadview *et al.* Jan. 2, 2003 Unbundled Switching to Unbundled Loop Proposed Migration *Ex Parte* Letter at 2. According to the plan, step 1 requires incumbent LECs to develop, implement, and then have certified a loop migration process in each state. *Id.* Then, according to step 2, once an incumbent LEC has implemented a satisfactory migration process, it can petition the state to determine sufficient customer density to justify facilities investment. *Id.* at 4. Step 3 provides competitive LECs with at least 18 months to migrate lines above the requisite numbers to their own facilities; for subsequent migrations, competitive LECs will have six months to establish collocation and migrate lines above the requisite number to their own facilities. Lastly, step 4 of their proposal requires that competitive LECs be able to acquire customers using unbundled local circuit switching, pending implementation of an incumbent LEC efficient loop migration process.

cations firms.[1625] While we decline to adopt these proposed transition plans,[1626] and any other transition proposal in full, we base our decision on evaluation of those proposals in the record and our transition plan goals noted above.

531. We find that state commissions are well suited to monitoring the operational aspects of this migration, and we therefore incorporate a state role into our transition plan. State commissions have strong incentives both to encourage competition (as a means of providing citizens of their states with a choice of service providers) as well as to foster new investment (as a means of promoting economic growth in their states). The evidence in the record demonstrates that state commissions have a strong interest in creating the conditions for transition from service using unbundled local circuit switching to unbundled stand-alone loops wherever possible, and managing the transition in a way that promotes investment as well as continued choice for consumers. We therefore require competitive and incumbent LECs to jointly

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[1625] *See* Letter from Christopher J. Wright, Counsel for Z-Tel, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Nov. 22, 2002) (Z-Tel Nov. 22, 2002 *Ex Parte* Letter). Z-Tel's plan envisions the availability of unbundled access to switching until vibrant, effective, and efficient wholesale alternative providers of mass market switching and transport services are in place. *Id.* at 1. The five-step plan consists of equal access requirements for loop provisioning; competitive wholesale interoffice transport; switch-based competitive LEC transfer from unbundled local circuit switching; competitive analysis of wholesale providers by state commissions; and a transition to wholesale providers. *Id.* at 2. A key aspect of the plan is to make sure the steps are completed in sequence before proceeding to the next step. *Id.* According to Z-Tel, the principal adjudicator as to whether a step has been completed is the state commission. *Id.* at 6.

[1626] While the Supreme Court has advised that "[t]he Commission cannot, consistent with the statute, blind itself to the availability of elements outside the incumbent's network," including review of requesting carriers ability to "self-provision, or purchas[e] from another provider," the Commission is not obligated to establish a wholesale market for switching and transport. *See Iowa Utils. Bd.*, 525 U.S. at 389.

submit the details of their implementation plan to the appropriate state commission. In addition, we require competitive LECs to notify the relevant state commissions when they have submitted their orders for migration. Finally, we require incumbent LECs to notify the relevant state commission when they have completed the migrations.

532. Competing carriers must transfer their embedded base of DS1 enterprise customers to an alternative service arrangement within 90 days from the end of the 90-day state commission consideration period, unless a longer period is necessary to comply with a "change of law" provision in an applicable interconnection agreement.[1627] To the extent a state commission finds "no impairment" for mass market customers in a particular market, we require mass market carriers to commit to an implementation plan with the appropriate incumbent LEC within two months from the finding of no impairment. Thus, if a state commission determines that there is no impairment for a particular market in its initial 9 month review, the carriers must have a plan in place within 11 months of the effective date of this Order. By five months after a finding of no impairment, competitive LECs may no longer request access to unbundled local circuit switching. Moreover, we require competitive LECs to submit the necessary orders[1628] for one-third of their customers in accordance with the following schedule: (1) 13 months after a finding of no impairment: Each competitive LEC must submit orders for one-third of all its unbundled local circuit switching end users; (2) 20 months after a finding of no impairment: Each competitive LEC must submit orders for half of its remaining unbundled local circuit switching end

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[1627] *See infra* Part VIII.D (transition period).

[1628] For purposes of calculating the number of customers who must be migrated, the embedded base of customers shall include all customers served using unbundled switching that are not being served with transitional unbundled switching.

users; and (3) 27 months after a finding of no impairment: Each competitive LEC must submit orders for its remaining unbundled local circuit switching end users.[1629]

[1629] We disagree with Chairman Powell's claim that permitting competitive LECs to transition their mass market customers off of unbundled switching over the course of a three-year period is either unreasonable or unlawful. *Chairman Powell Statement* at 13. As an initial matter, we note that, at the time of this Order's adoption, there were over ten million customers receiving local service over unbundled local switches. Chairman Powell concedes that the Commission has the discretion to set forth reasonable transition periods and, given the enormous number of customers that may potentially be affected, we believe that three years is a reasonable amount of time. *Chairman Powell Statement* at 13. Further, we note that this Commission voted unanimously to give the states unlimited discretion to determine the appropriate transition period for migrating customers off of enterprise loops and transport UNEs where they find no impairment for these facilities. *See, e.g., supra* para. 338 (stating expectation that states will give competitors an "appropriate period" to transition from unbundled loops). Significantly, Chairman Powell does not appear to be concerned about legality of continued access to these facilities after an "*express finding* of no impairment." *Chairman Powell Statement* at 13. Moreover, under our switching transition period, competitive LECs must begin transitioning one-third of their customers to their own facilities 13 months after a finding of no impairment. Once competitive carriers have incurred the fixed costs associated with deploying their own switching facilities to support one-third of their customers, we find it likely that such carriers will have an incentive to fill the capacity of their switch such that they will not necessarily need the full three years to complete the migration—assuming, of course, that the incumbents can successfully manage the cutover process. Finally, providing a sufficiently long transition for the embedded base of customers should have the effect of encouraging competitive entry and investment in the future. Without such a transition, potential entrants might fear that investments they make in facilities, office systems, and marketing would be stranded if future unbundling decisions suddenly made their business plans no longer viable.

E. Shared Transport

1. Background

533. In the *Triennial Review NPRM*, the Commission sought comment on whether it should retain or modify the existing unbundling obligations for shared transport.[1630] The Commission previously has defined shared transport as "transmission facilities shared by more than one carrier, including the incumbent LEC, between end office switches, between end office switches and tandem switches, and between tandem switches in the incumbent LEC's network."[1631] In the *Shared Transport Order*, the Commission clarified the extent to which incumbent LECs are obligated to provide requesting carriers with access to shared transport.[1632] The Commission later found in the *UNE Remand Order* that, without access to shared transport, requesting carriers are impaired in their ability to use unbundled local circuit switching.[1633]

2. Discussion

534. Incumbent LECs and competitive LECs demonstrate that the use of unbundled shared transport is tied exclusively to unbundled local switching.[1634] Verizon and SBC assert that

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[1630] *Triennial Review NPRM*, 16 FCC Rcd at 22809-10, para. 63.

[1631] *UNE Remand Order*, 15 FCC Rcd at 3862, para. 370; 47 C.F.R. § 51.319(d)(1)(iii); *see generally Shared Transport Order*, 12 FCC Rcd 12460.

[1632] *Shared Transport Order*, 12 FCC Rcd at 12462, para. 2.

[1633] *UNE Remand Order*, 15 FCC Rcd at 3862-66, paras. 369-79.

[1634] *See, e.g.*, SBC Comments at 81; Verizon Comments at 95 n.319; SBC Reply at 141; Letter from Peter Karoczkai, InfoHighway Communications Corp., to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 1 (filed Feb. 14, 2003) (InfoHighway Feb. 14, 2003 *Ex Parte* Letter); Z-Tel Reply at 68-69; *UNE Remand Order*, 15 FCC Rcd at 3862, para. 369 n.731 (stating, "the only carrier that would need shared transport facilities would be one that was

because switching and shared transport are inextricably linked, if incumbent LECs are no longer obligated to unbundle switching, they should no longer be obligated to unbundle shared transport.[1635] We agree. Therefore, we find that requesting carriers are impaired without access to unbundled shared transport only to the extent that we find they are impaired without access to unbundled switching.[1636] Because unbundled shared transport is linked to the use of unbundled switching, and because the Commission delegates a role to state commissions in identifying impairment for unbundled circuit switching,[1637] states should incorporate into their analyses of switching the economic characteristics of shared transport and other backhaul.[1638] Thus, we find that requesting carriers are impaired without access to unbundled shared transport—transmission facilities shared by more than

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using an unbundled local switch"); *Id.* at 3863, para. 371 (stating, "shared transport is technically inseparable from unbundled switching.").

[1635] *See* SBC Comments at 81; Verizon Comments at 95 n.319; SBC Reply at 141.

[1636] This conclusion is similar to the Commission's conclusion in the *UNE Remand Order*. *See* 15 FCC Rcd at 3862, para. 369 ("where an incumbent LEC provides requesting carriers with access to unbundled switching, we require incumbent LECs also to provide access to unbundled shared transport services").

[1637] *See supra* Part VI.D (describing the role states may take in identifying impairment for unbundled local circuit switching).

[1638] The record indicates that without access to unbundled shared transport, a requesting carrier with access to unbundled switching would have to obtain dedicated transport from the incumbent LEC, from a third party, or by self-provisioning. *See, e.g.*, AT&T Comments at 159, 161; *see also UNE Remand Order*, 15 FCC Rcd at 3864, para. 374. Our discussion of dedicated transport, above, analyzes the barriers to entry related to self-deploying or otherwise obtaining dedicated transport facilities. *See* Part VI.B.3.d, *supra*. The record also indicates that shared transport is rarely available from third party sources and no incumbent LEC presents evidence of third-party alternatives to unbundled shared transport. *See* UNE-P Coalition Comments at 54; CTC Reply at 18.

one carrier between end office switches, between end office switches and tandem switches, and between tandem switches[1639] in the incumbent LEC's network—to the extent that local circuit switching is unbundled.

F. Packet Switching

1. Background

535. In the *UNE Remand Order*, the Commission defined "packet switching capability" as "routing or forwarding packets, frames, cells or other data units based on address or other routing information contained in the packets, frames, cells or other data units" as well as the functions performed by DSLAMs.[1640] The Commission also excluded packet switching functionalities from the section 251(c)(3) unbundling obligations, except in limited circumstances.[1641]

[1639] Shared transport between local tandem switches sometimes is used by competing carriers for "transiting"—a means of indirectly interconnecting with other competing carriers for the purpose of terminating local and intraLATA traffic. *See, e.g.*, InfoHighway Feb. 14, 2003 *Ex Parte* Letter at 2. To date, the Commission's rules have not required incumbent LECs to provide transiting. *See Application by Verizon Maryland Inc., Verizon Washington, D.C. Inc., Verizon West Virginia Inc., Bell Atlantic Communications Inc., (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization to Provide In-Region, InterLATA Services in Maryland, Washington, D.C., and West Virginia*, WC Docket No. 02-384, Memorandum Opinion and Order, 18 FCC Rcd 5212, 5271, para. 101 (2003) (*Verizon Maryland/DC/West Virginia 271 Order*). The Commission plans to address transiting in its pending *Intercarrier Compensation* rulemaking proceeding. *See Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Notice of Proposed Rulemaking, 16 FCC Rcd 9610 (2001) (*Intercarrier Compensation NPRM*).

[1640] *UNE Remand Order*, 15 FCC Rcd at 3833-34, paras. 302-04; *see* 47 C.F.R. § 51.319(c)(4).

[1641] *UNE Remand Order*, 15 FCC Rcd at 3838-39, para. 313; *see* 47 C.F.R. § 51.319(c)(5). An incumbent LEC must provide access to

536. In the *Triennial Review NPRM*, the Commission sought comment on whether, in light of changed circumstances, it should retain this limited unbundling requirement and if so, whether it should modify this requirement or the existing definition of packet switching, including the DSLAM functionality.[1642] The Commission also sought comment on the benefits and burdens resulting from the packet switching unbundling requirement and whether there are any alternative, less burdensome options available to achieve the goals of the Act.[1643]

2. Discussion

537. We find, on a national basis, that competitors are not impaired without access to packet switching, including routers and DSLAMs.[1644] Accordingly, we decline to unbundle packet switching as a stand-alone network element.[1645] We further find that the Commission's limited exception to its packet-switching unbundling exemption is no longer necessary.[1646] Lastly, our decision not to unbundle

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unbundled packet switching only where the incumbent LEC has deployed digital loop carrier systems or otherwise deployed fiber optic facilities in the distribution part of the loop; has no spare copper loops capable of providing the xDSL service the requesting carrier seeks to offer; has not permitted the requesting carrier to collocate its own DSLAM at an appropriate subloop point; and has deployed packet switching for its own use.

[1642] *Triennial Review NPRM*, 16 FCC Rcd at 22809, paras. 61-62.

[1643] *Id.* at 22809, para. 62.

[1644] As discussed below, this conclusion applies to both the mass market and the enterprise market.

[1645] *See UNE Remand Order*, 15 FCC Rcd at 3835, para. 306. The incumbent LECs contend that packet switching should not be required as a UNE. *See, e.g.*, SBC Comments at 52; Qwest Comments at 41. Sprint also states that it "does not quarrel with this position, at least in the central office environment." *See* Sprint Reply at 32.

[1646] *See UNE Remand Order*, 15 FCC Rcd at 3838-39, para. 313. Access to packet switching functionalities as used in DLC loop

stand-alone packet switching is consistent with the goals of section 706 of the 1996 Act.[1647]

538. Evidence in our record demonstrates that the considerations applied in the *UNE Remand Order* apply with equal force at this time to support our earlier decision not to unbundle packet switching as a stand-alone network element.[1648] Specifically, the record shows that a wide range of competitors are actively deploying their own packet switches, including routers and DSLAMs to serve both the enterprise and mass markets,[1649] and that these facilities are

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architecture is discussed in Part VI.A.4., *infra*, which addresses unbundled loops.

[1647] 47 U.S.C. § 157 nt.

[1648] Based on the record in this proceeding, we deny the portion of WorldCom's Petition for Reconsideration arguing that the Commission should reconsider its prior decision to not unbundle packet switching beyond the limited exception provided for in our vacated rules. *See* MCI WorldCom Feb. 17, 2000 Petition for Reconsideration at 2-15. For the same reasons, we deny the portion of the Petition for Reconsideration and Clarification of Intermedia Communications, Inc. arguing that the Commission should reconsider its prior decision to not unbundle packet switching. *See* Intermedia Feb. 17, 2000 Petition for Reconsideration at 3-13. Because we decline to unbundle packet switching as a stand-alone UNE under our new unbundling framework, we dismiss as moot the arguments raised in the Intermedia Petition for Reconsideration and the Petition for Reconsideration filed by CompTel dealing with forms of packet switching and combinations that include packet switching. *See* Intermedia Feb. 17, 2000 Petition for Reconsideration at 3-13; CompTel Feb. 17, 2000 Petition for Reconsideration.

[1649] According to the BOC UNE Fact Report 2002, the largest providers of both Frame Relay and ATM services are AT&T, WorldCom, and Sprint. *See* BOC UNE Fact Report 2002 at II-24. In addition, Covad has deployed DSLAMs, routers, ATM equipment in nearly 2000 central offices—reaching 45% of the country in 35 states. *See* Letter from Florence Grasso, Covad, to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338, Attach. at 2 (filed Nov. 7, 2002) (Covad Nov. 7, 2002 *Ex Parte* Letter); Covad Comments at 5; *see also Third Section 706 Report 2002*, 17 FCC Rcd at 2873-74, para. 70.

much cheaper to deploy than circuit switches.[1650] In fact, according to the BOC UNE Fact Report 2002, unrebutted in the record, competitive LEC deployment of packet switching has doubled since the *UNE Remand Order*, from 860 in 1998 to at least 1,700 in 2001.[1651] In addition, more than 55 competitive LECs have deployed packet switches in more than 200 different cities.[1652] In the top 100 MSAs, the average number of packet switches per MSA has grown by an average of nearly 150 percent since our last UNE review.[1653] The record also shows that several carriers maintain their own frame relay and ATM networks with AT&T, WorldCom, and Sprint each operating extensive, nationwide networks.[1654] In addition, competitive carriers lead incumbent LECs in the deployment of Gigabit Ethernet switches.[1655]

539. Consistent with the *UNE Remand Order*, we conclude that any collocation costs and delays incurred by requesting carriers to provide packet switched services do not rise to a level so as to require us to modify the Commission's previous finding not to unbundle packet switching.[1656] In fact, the

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[1650] According to the BOC UNE Fact Report 2002, packet switches are much cheaper to deploy than circuit switches. *See* BOC UNE Fact Report 2002 at II-33. Because of extensive self-deployment by competitive LECs, we need not rely on the existence of a wholesale market for packet switching.

[1651] *Id.* at II-23.

[1652] *Id.*

[1653] *Id.* at II-23 and Table 11.

[1654] *Id.* at II-24 and Figure 5.

[1655] *Id.* at II-25.

[1656] *See UNE Remand Order*, 15 FCC Rcd at 3835-40, paras. 306-17; *see also* Covad Comments at 56 (discussing the costs associated with remote terminal collocation); *see also* ASCENT Comments at 40; *but see* Verizon Comments at n.289 (stating that "subsequent developments—principally, the nearly pervasive collocation of companies such as Covad, the availability of cageless and shared collocation, and the adoption of

record shows that any disadvantages that competitive LECs may face in obtaining collocation space are likely outweighed by their advantage in relying solely on newer, more efficient technology.[1657] In addition, most of the arguments regarding the difficulties associated with collocation for packet switches deal with collocation at the remote terminal, rather than the central office. We discuss this particular issue in our discussion of unbundled loops.[1658] Accordingly, there do not appear to be any barriers to deployment of packet switches that would cause us to conclude that requesting carriers are impaired with respect to packet switching. We therefore find that the evidence in the record confirms the Commission's findings in the *UNE Remand Order* that competitors continue to actively deploy their own packet switches, including routers and DSLAMs, and are not impaired without unbundled access to these facilities from incumbents.

540. Most parties that favor the unbundling of packet switching focus their arguments on unbundling the packet switching functionality as it exists in DLC systems that are deployed in the loop plant to provide multiplexing, switching, and routing functionalities between the customer premises and the central office.[1659] Our rules covering these situations are discussed in Part VI.A.4.a.(v), which addresses unbundled loops. In view of our analysis in that section, we decline to permit any limited exceptions to our decision not to unbundle packet switching.[1660]

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strict intervals for establishing collocation arrangements—demonstrate than any impairment no longer exists.").

[1657] *See* BOC UNE Fact Report 2002 at II-33 & n.127.

[1658] *See infra* Part VI.A.4. (addressing unbundled loops).

[1659] *See, e.g.*, Sprint Comments at 40-45; WorldCom Comments at 113-19; Covad Comments at 54-65.

[1660] In addition, the rules we adopt for unbundled loops do not require incumbent LECs to provide unbundled access to any electronics or other equipment used to transmit packetized information over hybrid loops,

541. Finally, because packet switching is used in the provision of broadband services, our decision not to unbundle stand-alone packet switching is also guided by the goals of, and our obligations under, section 706 of the 1996 Act.[1661] In order to ensure that both incumbent LECs and competitive LECs retain sufficient incentives to invest in and deploy broadband infrastructure, such as packet switches, we find that requiring no unbundling best serves our statutorily-required goal. Thus, we decline to require unbundling on a national basis for stand-alone packet switching because it is the type of equipment used in the delivery of broadband.

G. Signaling Networks

1. Background

542. In the *Triennial Review NPRM*, the Commission sought comment on whether it should modify its requirement that signaling be unbundled for competitive LECs.[1662] Signaling systems facilitate the routing of telephone calls between switches and are necessary components of providing circuit-based telecommunications services.[1663] The telecommunications network in the United States employs out-of-band signaling, meaning that the signaling network is physically separate from the carrier's voice network.[1664] Out-of-band signaling is performed using the SS7 protocol and requires access to an SS7 network.[1665]

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such as xDSL-capable line cards installed in DLC systems or equipment used to provide passive optical networking capabilities to the mass market. *See infra* Part VI.A.4.a.(v).

[1661] 47 U.S.C. § 157 nt.

[1662] *Triennial Review NPRM*, 16 FCC Rcd at 22811, para. 65.

[1663] *Local Competition Order*, 11 FCC Rcd at 15723-24, para. 455.

[1664] *Id.*

[1665] SS7 networks use signaling links to transmit routing messages between switches and call-related databases (such as the Line Information Database, Toll Free Calling Database, and Advanced Intelligent Network

543. In the *Local Competition Order*, the Commission determined that competitive LECs would be impaired without access to the incumbent LECs' unbundled signaling links and STPs.[1666] The Commission concluded that the alternative signaling methods available would provide a lower quality of service to the competitive carriers.[1667] In the *UNE Remand Order*, however, the Commission recognized that a competitive signaling market was emerging. Nevertheless, the Commission determined that these alternative networks could not match the incumbent LECs' signaling systems in terms of quality and ubiquity, and accordingly, ruled that signaling networks must continue to be unbundled.[1668]

2. Discussion

544. As explained above in our discussion of unbundled switching, in the instances in which incumbent LECs will be required to provide access to switching as a UNE, carriers purchasing the switching UNE must also gain access to incumbent LEC signaling.[1669] In all other cases, however, we determine that there are sufficient alternatives in the market available to incumbent LEC signaling networks and competitive LECs are no longer impaired without access to such networks as UNEs for all markets.[1670]

Databases). These links enable a switch to send queries via the SS7 network to call-related databases, which return customer information or instructions for call routing to the switch. A typical SS7 network includes a signaling link that transmits signaling information in packets, from a local switch to a STP, which is a high-capacity packet switch. *UNE Remand Order*, 15 FCC Rcd at 3866, para. 380 n.746.

1666 *Local Competition Order*, 11 FCC Rcd at 15740, para. 482.

1667 *Id.*

1668 *UNE Remand Order*, 15 FCC Rcd at 3873, para. 397.

1669 *See supra* Part VI.D.

1670 As stated below, this conclusion applies to both the mass market and the enterprise market.

545. We conclude that, in the last several years, the market for signaling networks has matured. The record reflects that multiple alternative providers are available to provide rival signaling services to competitive LECs.[1671] Accordingly, we *conclude that, as a general matter, competitive LECs are no* longer impaired without access to the incumbent LECs' signaling networks as a UNE. In performing our impairment analysis, we consider whether barriers exist for a competitive LEC to serve customers through either deploying its own signaling network or by purchasing signaling from alternative providers to the incumbent LEC. We determine that no such barriers exist. A review of our record reveals that there are numerous competitive suppliers of signaling services, such as Illuminet, TSI, Southern New England Telephone, AT&T, WorldCom and Sprint,[1672] all of which are actively providing signaling services to competitive LECs on a commercial basis. For instance, Illuminet, which owns the largest signaling network in the United States that is unaffiliated with an incumbent LEC, has access to all of the LATAs of the BOCs and major independent LECs, operates 14 STP pairs, and provides signaling to competitive carriers on a national scope.[1673] Similarly, TSI provides a nationwide signaling service that offers SS7 access to and from nearly all LATAs within the United States.[1674] There are also regional SS7 options for competitive carriers. Sprint, for example, operates a regional SS7 network, which contains ten pairs of regional STPs and one national STP pair that serves Sprint customers

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[1671] *See, e.g.*, Sprint Comments at 49-50; Illuminet Comments at 3-5; Verizon Comments at 129-32.

[1672] *See* Illuminet Comments at 4 n.3; Verizon Comments at 129-33.

[1673] Illuminet Comments at 5.

[1674] *See* SBC Reply at 164; *see generally TSI Connections: Home* (visited Jan. 3, 2003) <http://www.tsiconnections.com>.

in 18 states.[1675] ICG also offers a regional SS7 service, which is available from over thirty cities via ICG's regional STP access hub nodes.[1676] Indeed, there is evidence in the record that many competitive LECs are using alternative providers for most or all of their signaling needs.[1677] There is also evidence of self-deployment of SS7 network capabilities by competitive carriers, such as TimeWarner Telecom and NewSouth.[1678] We find, therefore, that for competitive carriers deploying their own switches, there are no barriers to obtaining signaling or self-provisioning signaling capabilities and we do not require incumbent LECs to continue offering access to signaling as a UNE under section 251(c)(3) of the Act.

546. Consistent with this analysis, we reject the claims of competitive carriers that signaling networks should remain available as UNEs.[1679] Even those carriers arguing for the

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[1675] Sprint Reply, Attach. A, Joint Declaration of John D. Chapman and Jeffrey L. Leister (Sprint Chapman/Leister Reply Decl.) at para. 6.

[1676] *See* Verizon Comments at 131; *see generally Welcome to ICG Communications* (visited Jan. 3, 2003) <http://www.icgcom.com>.

[1677] For instance Illuminet states that it has more than 900 customers, including incumbent LECs, competitive LECs, interexchange carriers, CMRS providers and Internet service providers that are connected to its network by approximately 2700 access links and 950 signaling points. Illuminet Comments at 5. In addition, Sprint provides evidence that the vast majority of competitive LECs providing service in Sprint's local territories do not purchase UNE signaling from Sprint. Sprint Comments at 50.

[1678] Sprint Reply at 40; Verizon Comments at 132 (citing evidence that Time Warner and NewSouth have deployed their own signaling networks); *see also NewSouth Communications Completes SS7 Network Buildout* (Mar. 29, 2001) <www.newsouth.com/news/press_releases/a349.asp>.

[1679] *See, e.g.*, Allegiance Comments at 31-37; ALTS *et al.* Comments at 87-89; NuVox Comments at 106-07; *see also* Letter from Joseph O. Kahl, Director—Regulatory Affairs, RCN Telecom Services, to Marlene

retention of signaling as a UNE recognize that multiple alternative providers exist.[1680] These carriers argue, however, that because alternative providers utilize fewer STPs,[1681] instead of one STP in each LATA, such providers do not offer the same level of ubiquity and thus, are not a genuine substitute to the incumbent LECs' signaling.[1682] We find these arguments unpersuasive. Our impairment analysis does not require exact replication of the incumbent LECs' networks. Rather, when it is evident that there are alternative providers for a particular network element, the Commission must determine whether the alternative product or self-provisioning can be used in an economic manner to enter and stay in the market. This is clearly the case with signaling networks. The record reflects that many competitive LECs use either their own signaling networks or the networks of alternative providers to provide signaling for their customers.[1683] Although competitive SS7 providers state that

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H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Jan. 23, 2003) (RCN Jan. 23, 2003 *Ex Parte* Letter).

[1680] For instance, Allegiance admits that Illuminet, TSI, Southern New England Telephone, AT&T, WorldCom and Sprint all provide signaling services that bear a resemblance to unbundled incumbent LEC SS7. Allegiance Comments at 31.

[1681] STPs are packet switches that provide access to the SS7 network and route SS7 messages among service switching points and service control points. These are the traffic controllers of the SS7 network and typically consist of highly reliable computers running special software. Allegiance Comments at 32 n.49. We readopt here the *UNE Remand Order*'s conclusion that when a requesting telecommunications carrier purchases unbundled local circuit switching from an incumbent LEC, the incumbent LEC must allow the competitive LEC to use its service control point element in the same manner, and via the same signaling links, as the incumbent LEC itself. *See UNE Remand Order*, 15 FCC Rcd at 3878, para. 410.

[1682] *See, e.g.*, Allegiance Comments at 32; ALTS *et al.* Comments at 88.

[1683] *See* Illuminet Comments at 5; Verizon Comments at 129-33.

their networks tend to have STPs in various strategically located points, while the BOCs have STPs in every LATA, such providers claim that it is unnecessary to have an STP in every LATA to ensure network redundancy and reliability.[1684] Moreover, there is evidence in the record that the incumbent LEC signaling facilities are being modified more closely to resemble the networks of the alternative providers. For instance, BellSouth has reduced the number of STPs it has deployed by 50 percent and no longer has an STP in every LATA.[1685]

547. We find the appropriate level of granularity for our analysis to be at the national level. Two of the alternative signaling networks discussed above are national networks that competitive LECs can utilize throughout the country. Both the Illuminet and TSI networks are designed with pairs of STPs strategically located throughout the country, in order to offer competitive carriers access to their SS7 networks nationwide.[1686] Other SS7 providers, such as ICG and Sprint, have fewer STP pairs and offer a more regional SS7 service—but still a service that spans numerous states and markets.[1687] Thus, the availability of alternatives does not vary significantly from region to region. Indeed, the main distinction between signaling offered in different geographic areas is the identity of the incumbent LEC providing signaling, rather than the availability of alternative providers. Moreover, our conclusion applies equally to the mass market and the enterprise market. Signaling networks are multistate in scope and the feasibility of using alternative providers is linked to whether a carrier has deployed its own switches,

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[1684] For instance, Sprint operates eleven STPs that serve Sprint's customers in eighteen states. *See, e.g.*, Sprint Reply; *see also* Sprint Chapman/Leister Reply Decl. at paras. 3, 6-7.

[1685] BellSouth Comments at 103.

[1686] *See, e.g.*, Illuminet Comments at 4; SBC Reply at 164.

[1687] *See* Sprint Reply at 40; SBC Reply at 164.

rather than the types of customers the carrier serves.[1688] Accordingly, as we stated above, in the instances that carriers purchase switching as a UNE under the terms established in this Order they will continue to obtain access to the incumbent LECs' signaling networks. For carriers deploying their own switches, the signaling networks are accessed via the switch, therefore, the feasibility of using alternative signaling providers would not be different whether the carrier serves enterprise or mass market customers.

548. Finally, we note that although we are no longer requiring incumbent LECs, pursuant to section 251(c)(3), to provide unbundled access to their signaling networks, there is a clear obligation on the incumbent LECs, pursuant to sections 251(a), 251(c)(2) and our rules implementing these requirements, to provide for interconnection between their signaling networks and the signaling networks of alternative providers.[1689] Based on the evidence in the record that third party providers of signaling are currently interconnected with the incumbent LEC signaling networks, we conclude that such interconnection is clearly technically feasible and that nothing in this Order should be interpreted as altering those interconnection obligations.[1690]

[1688] Switch technology requires each local switch to connect to a single STP. Therefore, a carrier that has deployed its own switch may link its switch to a signaling network of its choosing. *See UNE Remand Order*, 15 FCC Rcd at 3868-69, paras. 367-87.

[1689] 47 U.S.C. §§ 251(a), 251(c)(2).

[1690] For example, Sprint's SS7 network is interconnected with a variety of signaling providers including: AT&T, WorldCom, Transaction Network Services, SNET, Illuminet, Qwest, Bell South, Verizon, SBC, and AT&T Wireless. Sprint Chapman/Leister Reply Decl. at para. 5.

H. Call-Related Databases

1. Background

549. Call-related databases are databases that are used in signaling networks for billing and collection or for the transmission, routing or other provision of telecommunications services.[1691] We have identified several specific databases as covered by our call-related database requirements: (i) LIDB;[1692] (ii) CNAM;[1693] (iii) Toll Free Calling;[1694] (iv) LNP;[1695] (v) AIN;[1696] and (vi) E911.[1697] Parties have identified

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[1691] These are not those databases and systems covered by the Commission's operations support systems (OSS) requirements, discussed in Part VI.I. *infra*. *See UNE Remand Order*, 15 FCC Rcd at 3875, para. 403.

[1692] The Line Information Database or "LIDB" contains all valid telephone numbers and calling card information in a specific region (*i.e.*, incumbent LEC in-region territory). NEWTON'S TELECOM DICTIONARY 429 (18th ed.2002). Access to the LIDB supports carrier provision of such services as Originating Line Number Screening, Calling Card Validation, Billing Number Screening, Calling Card Fraud and Public Telephone Check. These services are provided in conjunction with local exchange, toll and other telecommunications services.

[1693] The Caller ID with Name database or "CNAM" allows carriers to provide Caller ID and other CLASS services. *See UNE Remand Order*, 15 FCC Rcd at 3876, para. 406.

[1694] Databases at the core of all toll free number services (*i.e.*, 800, 888) are administered by an independent number administrator. *See Toll Free Service Access Codes*, CC Docket No. 95-155, Fifth Report and Order, 15 FCC Rcd 11939, 11948-49, para. 25 (2000) (*Toll Free Order*).

[1695] Local Number Portability databases are used to facilitate the porting of numbers between local exchange carriers and are deployed through a system of multiple regional databases. Each regional database is managed by the local number portability administrator (LNPA). *See Telephone Number Portability*, CC Docket No. 95-116, Second Report and Order, 12 FCC Rcd 12281, 12296, para. 21 (1997) (*Number Portability Order*).

[1696] The Advanced Intelligent Network (AIN) uses distributed intelligence in centralized databases to control call processing and manage

in the record no additional databases covered by the *UNE Remand Order's* definition for call-related databases.

550. In the *UNE Remand Order*, the Commission found that competitors—even those that deployed their own switching equipment—would be impaired without access to the incumbent LECs' call-related databases.[1698] Moreover, the Commission noted that its analysis of call-related databases is intertwined with its analysis of signaling, because signaling is necessary to obtain access to certain call-related databases.[1699]

2. Discussion

551. We find that competitive carriers that deploy their own switches are not impaired in any market without access to incumbent LEC call-related databases, with the exception of the 911 and E911 databases as discussed below.[1700] For carriers that deploy their own switches, there is evidence in the record that, along with signaling, there are a substantial number of competitive suppliers of call-related databases that competitive LECs can reliably utilize as an alternative to the incumbent LEC's services. Moreover, because competitive carriers access call-related databases through signaling networks, it follows that since we found that competitive carriers have alternative providers available and are not impaired without access to unbundled signaling, competitive carriers are also not impaired without access to call-related

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network information, eliminating the need for those functions to be performed at every switch. *UNE Remand Order*, 15 FCC Rcd at 3875, para. 404.

[1697] 911 and E911 databases are used to support the provision of emergency 911 services. *UNE Remand Order*, 15 FCC Rcd at 3876, para. 406.

[1698] *Id.* at 3879, para. 411.

[1699] *Id.*

[1700] As stated below, this conclusion applies to both the mass market and the enterprise market.

databases. In such instances where switching remains a UNE, however, competitive carriers purchasing the switching UNE will have access to signaling and the call-related databases that the signaling networks permit carriers to access.[1701]

552. As with signaling, we find the appropriate level of granularity for our analysis to be at the national level. The alternative call-related database networks discussed below are national and regional networks that competitive LECs would be able to use throughout the country.[1702] Because these networks are multistate in scope the availability of alternatives does not vary significantly from market to market. Indeed, the main distinction between call-related databases offered in different geographic areas is the identity of the incumbent LEC providing access to the databases, rather than the availability of alternative providers. In addition, our conclusion applies equally to the mass market and the enterprise market. Call-related databases are accessed through signaling networks, which are national in scope and the feasibility of using alternative providers is linked to whether a carrier has deployed its own switches, rather than the types of customers the carrier serves.[1703] Accordingly, as we stated above, carriers that purchase switching as a UNE will also obtain unbundled access to the incumbent LEC's call-related databases. For carriers deploying their own switches, the call-related databases are accessed through signaling networks, which are accessed via the switch, therefore, the feasibility of using alternative providers would not be different whether the carrier serves mass market or enterprise customers.

[1701] *See supra* Part V.D.

[1702] With regard to the 911 and E911 databases, there is no evidence of alternative providers in any part of the country. Accordingly, the granularity of our impairment analysis is at the national level as well.

[1703] *UNE Remand Order*, 15 FCC Rcd at 3878, para. 410.

553. In performing our impairment analysis, we consider whether competitive LECs can serve customers through either deploying their own call-related databases or by purchasing call-related databases from providers other than the incumbent LEC. The record in this proceeding reveals that there are a number of competitive suppliers providing call-related database services that are comparable to the functionality of unbundled access, and these suppliers are actively providing such services to competitive LECs on a commercial basis.[1704] For example, Sprint maintains national database platforms, including Toll Free Calling, CNAM, LIDB and LNP.[1705] Illuminet provides its signaling customers with access to call-related databases, including Toll Free Calling, LNP, CNAM, and LIDB.[1706] Alternative providers such as Tekelec also provide access to AIN databases that competitive LECs can utilize to control call processing and manage network information.[1707] All of these providers offer competitive LECs call-related database products as an alternative to the incumbent LECs' services.[1708] Moreover, certain competitive LECs have self-deployed their own call-related databases.[1709]

554. We therefore reject the general claims of commenters that they are impaired without access to the incumbent LECs'

[1704] *See* Sprint Comments at 50-51; Verizon Comments at 133-36.

[1705] Sprint Chapman/Leister Reply Decl. at para. 9.

[1706] Illuminet Comments at 5-7.

[1707] Verizon Comments at 134-35.

[1708] *See, e.g.*, Illuminet Comments at 5-7; Sprint Comments at 39-40.

[1709] For instance, WorldCom has constructed its own CNAM database. WorldCom Reply at 164. In addition, according to Verizon, Time Warner Telecom has, or is in the process of constructing, a LNP database in addition to its own SS7 network. Verizon Comments at 132 n.475.

call-related databases.[1710] Specifically, a number of carriers argue that they are impaired without access to the incumbent LECs' CNAM and LIDB databases. Although such carriers recognize that alternative providers are available for these databases, they contend that third-party CNAM and LIDB databases are inferior to those of the incumbent LECs.[1711] We find these arguments for impairment to be unpersuasive. When it is evident that there are alternative providers for a particular network element, the question is not whether the alternatives are an exact replica of the element offered by the incumbent LEC, but whether the alternative products or self-provisioning are reliable products that can be used in an economically sound manner to enter and stay in the market. In this instance, it is clear that carriers can either self-provision or use alternative providers to obtain CNAM and LIDB database services. Indeed, WorldCom has constructed its own CNAM database that it accesses using its own signaling network.[1712] Furthermore, there is evidence in the record that many competitive carriers are using alternative providers to obtain CNAM and LIDB database services, and commenters provide no persuasive evidence as to why CNAM and LIDB databases offered by such vendors are insufficient alternatives to the incumbent LEC.[1713] For instance, Illuminet claims that it offers access, through its SS7 network, to all of the LIDB databases in the United States for various purposes, and also manages and operates its own

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[1710] *See, e.g.*, AT&T Comments at 239-40; CompTel Comments at 86; ALTS *et al.* Comments at 90; WorldCom Comments at 122-27; *see also* AT&T Jan. 10, 2003 *Ex Parte* Letter.

[1711] *See, e.g.*, ALTS *et al.* Comments at 90.

[1712] WorldCom Reply at 165.

[1713] For instance, WorldCom claims that it would be unable to duplicate the LIDB database, however, it fails to address the alternative providers of LIDB that are available. WorldCom Reply at 165.

LIDB database.[1714] Illuminet also offers a CNAM database and a CNAM delivery access and transport service that provides SS7 connectivity to all available CNAM databases for nationwide name delivery for wireline and wireless carriers.[1715] In addition, Targus Information Services offers a Caller Name Express services that provides nationwide calling name delivery with over 140 million names, from a database accessible through SS7.[1716] We find, therefore, that competing carriers are not impaired without access to incumbent LEC CNAM and LIDB databases.

555. We similarly find that carriers are not impaired without access to the Toll Free Calling and LNP databases. Like CNAM and LIDB databases, there are third-party vendors available to provide competitive carriers access to Toll Free Calling and LNP databases. For instance, Illuminet's SS7 network provides access to all toll free numbers in the country for call-routing.[1717] Illuminet also provides competitive carriers extensive local number portability services, including service order administration and network transport routing of all queries to nationwide LNP databases.[1718] Sprint also provides access to Toll Free Calling and LNP databases to customers of its SS7 services.[1719] Moreover, we note that competitive carriers have not claimed that these third-party alternatives to the incumbent LEC's Toll Free Calling and LNP databases are inferior to those offered by the incumbent LECs.

1714 Illuminet Comments at 6-7.

1715 *Id.*, App. B at 2.

1716 Sprint Comments at 51.

1717 Illuminet Comments at 7.

1718 *Id.* at 6.

1719 Sprint Chapman/Leister Reply Decl. at para. 8.

556. With regard to AIN databases, in the *UNE Remand Order*, the Commission determined that incumbent LECs were required to provide unbundled access to AIN platform and architecture, but concluded that the AIN service software was proprietary and not "necessary" for competitive LECs to gain unbundled access under section 251(d)(2)(A).[1720] Like the call-related databases discussed above, we conclude that the market for AIN platform and architecture has matured since the Commission adopted the *UNE Remand Order* and we no longer find that competitive LECs are impaired without unbundled access to those databases. For instance, Illuminet provides carriers access to AIN services that permit subscribers to manage incoming and outgoing calls through a web interface.[1721] In addition, the record indicates that Tekelec provides an AIN service center, which includes a service creation environment that "provides complete local visibility and control over network services, allowing telecommunications providers to rapidly bring new services to market."[1722] We also note that parties that supported unbundling did not provide specific information rebutting the evidence that these alternative offerings can be used by carriers in an economically sound manner to enter and stay in the market.[1723]

1720 *UNE Remand Order*, 15 FCC Rcd at 3875, 3882, paras. 402, 419.

1721 Illuminet Comments, App. B at 2.

1722 *See* Verizon Comments at 134-35 n.490.

1723 Consistent with our findings regarding the AIN databases, we dismiss as moot Low Tech Designs' Petition for Reconsideration of several aspects of the *UNE Remand Order*. Because we no longer require incumbent LECs to unbundle access to the AIN databases for carriers not using the incumbent LEC's switching capabilities, it is unnecessary to consider modifying the definition or the manner in which those carriers would be able to obtain access to those databases. *See* Low Tech Designs Petition for Reconsideration, CC Docket No. 96-98 (filed Feb. 15, 2000).

557. We conclude that competitive carriers continue to be impaired on a national basis without access to the 911 and E911 databases. Therefore, access to such databases must continue to be unbundled. Significantly, we note that no commenter has argued otherwise. Contrary to the call-related databases discussed above, no commenter in this proceeding has provided evidence of alternative providers of 911 or E911 databases that competitive carriers could utilize or of carriers self-provisioning their own services. Moreover, because of the unique nature of 911 and E911 services and the public safety issues inherent in ensuring nondiscriminatory access to such databases, we conclude that without evidence of alternative providers or the ability to self-deploy, competitive carriers must continue to obtain unbundled access to those databases to ensure that their customers have access to emergency services.

558. We reject competitive LECs' assertions that, we should require in this proceeding unbundled access to the incumbent LEC databases for bulk transfer of information for competitive carriers to maintain their own call-related databases.[1724] Specifically, competitive LECs claim that they should be able to access the CNAM database via batch download, which would allow them to obtain a copy and thus, maintain their own CNAM databases.[1725] We conclude that this issue is more properly addressed pursuant to the dialing parity requirements under section 251(b)(3),[1726] rather than our impairment analysis under section 251(d)(2). Our impairment analysis is necessarily focused on the appropriate access to incumbent LEC facilities that competitive LECs are

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[1724] *See, e.g.*, WorldCom Comments at 122-27.

[1725] WorldCom Comments at 125.

[1726] 47 U.S.C. § 251(b)(3). All local exchange carriers have the duty to provide nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays.

unable to self-provide or obtain from other sources, and as explained above, there is persuasive evidence that competitive LECs have alternative sources available to obtain access to call-related databases generally, and the CNAM database specifically. To the extent that competition may lead to inability to obtain complete CNAM databases that could impede the continued availability of nondiscriminatory dialing parity for all providers of local exchange services, that is an issue that ultimately will impact incumbent LECs as significantly as competitive LECs and therefore is more appropriate for treatment under the requirements of section 251(b)(3) than in this docket.[1727]

559. We also dismiss as moot WorldCom's Petition for Declaratory Ruling requesting Commission confirmation that requesting carriers are entitled to access LIDB data at cost-based rates when they use such data to provide interexchange and exchange access service.[1728] Because, as explained above, we conclude that competitive carriers are not impaired without access to the LIDB database as a UNE, it is unnecessary for us to determine whether use restrictions should be applied.[1729]

[1727] *See In the Matters of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, Area Code Relief Plan For Dallas And Houston, Ordered By The Public Utility Commission Of Texas, Administration of the North American Numbering Plan*, CC Docket Nos. 96-98, 95-185, 92-237, NSD File No. 96-8, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392, 19446, para. 106 (1996) (*Local Competition Second Report and Order*).

[1728] Petition of WorldCom for a Declaratory Ruling that ILECs are Prohibited from Imposing Use Restrictions on UNEs such as LIDB, CC Docket No. 01-338 (filed Aug. 8, 2002).

[1729] However, for general discussion of the types of services competitive carriers may use UNEs to provide *see supra* Part V.B.2.c.

560. We also reject the arguments of some parties that we should require incumbent LECs to provide unbundled access to Operator Services and Directory Assistance (OS/DA), contrary to the Commission's finding that there was no impairment in the *UNE Remand Order*.[1730] Moreover, we deny the Petition for Reconsideration of RCN Telecom Services arguing that the Commission should reconsider its prior decision to remove OS/DA from the UNE list.[1731] As the Commission concluded in the *UNE Remand Order*, there are multiple alternative providers of OS/DA that are available to competitive carriers and offer a level of quality similar to that of the incumbent LECs' services.[1732] The parties requesting the Commission to unbundle the databases underlying these services fail to provide evidence that the alternative providers cited in the *UNE Remand Order* no longer make these elements available. Instead, these parties claim that the alternative sources of OS/DA fail to provide the same level of quality as the incumbent LEC services.[1733] As we stated above in the signaling section, the Commission need not

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[1730] *See, e.g.*, ALTS *et al.* Comments at 90-95; WorldCom Comments at 127-29.

[1731] *See* RCN Telecom Services Petition for Reconsideration, CC Docket No. 96-98 (filed Feb. 17, 2000) (RCN Feb. 17, 2000 Petition for Reconsideration). We also deny MCI WorldCom's Petition for Reconsideration to the extent the Petition requests that OS/DA continue to be available as a UNE. *See* MCI WorldCom Feb. 17, 2000 Petition for Reconsideration at 18-19.

[1732] *UNE Remand Order*, 15 FCC Rcd at 3894, paras. 447-48.

[1733] *See* ALTS *et al.* Comments at 92. Moreover, RCN argues that operator services should remain a UNE because consumers sometimes rely on operators to route calls to PSAPs in emergency situations. RCN Petition for Reconsideration at 3. As we concluded in the *UNE Remand Order*, there are only limited instances where an operator would connect a consumer with a PSAP and there is no persuasive evidence that incumbent LEC call centers would be better able to determine the correct PSAP than alternative providers, especially if the incumbent LEC utilizes remote call centers. *UNE Remand Order*, 15 FCC Rcd at 3901, para. 460.

conclude that alternative providers are an exact substitute for the incumbent LEC in order to find no impairment. We have no evidence to suggest that anything has changed since the Commission's findings in the *UNE Remand Order* that would impair the ability of competitive LECs to obtain alternative sources for OS/DA. Furthermore, for the same reasons in the *UNE Remand Order*, we find that in order to ensure that competitive carriers have access to OS/DA, in those circumstances where switching is unbundled, we require incumbent LECs to provide unbundled access to competitive carriers purchasing the switching UNE, if the incumbent LEC does not provide customized routing necessary to use alternative providers.[1734] Lastly, we note, as the Commission did in the *UNE Remand Order*, that incumbent LECs continue to remain obligated pursuant to section 251(b)(3) to provide nondiscriminatory access to OS/DA.[1735]

I. OSS Functions

1. Background

561. In our previous orders, we defined OSS as consisting of five functions: pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's databases and information.[1736] These

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[1734] Moreover, we grant in part the Petitions for Clarification of MCI WorldCom and AT&T to the extent they request the Commission to clarify that such customized routing must be provided in a manner that allows competitive LECs to efficiently access either a third party's OS/DA platform or their own OS/DA Platform. *See* AT&T Feb. 17, 2000 Petition for Reconsideration at 20-24; MCI WorldCom Feb. 17, 2000 Petition for Clarification at 16-20; *see also* LSSI Reply at 5 (arguing that incumbent LECs have not yet made sufficient customized routing available).

[1735] *See UNE Remand Order*, 15 FCC Rcd at 3903, para. 464.

[1736] *See Local Competition Order*, 11 FCC Rcd at 15764, para. 518; *UNE Remand Order*, 15 FCC Rcd at 3884, para. 425. The Commission determined that incumbent LECs must make these five functions of OSS available to competitors on an unbundled basis.

functions are essential for carriers to serve mass market and enterprise customers. OSS includes manual, computerized, and automated systems, together with associated business processes and the data maintained and kept current in those systems.[1737] In the *UNE Remand Order*, we clarified that the pre-ordering OSS functions include access to loop qualification information.[1738] Based on this definition, in both the *Local Competition Order* and the *UNE Remand Order*, the Commission concluded that requesting carriers are impaired without access to the incumbent LEC's OSS as a UNE, and required incumbent LECs to provide nondiscriminatory access to all OSS functions.[1739] The Commission noted that the incumbent LECs' OSS provides access to vital information that is not available from third parties and is critical to the ability of competitive LECs to offer local exchange and exchange access service.[1740] In the *Triennial Review NPRM*, the Commission sought comment on whether we should retain these unbundling requirements in light of any changed circumstances that exist in the market.[1741]

2. Discussion

562. We adopt again the same definition of OSS as in our prior orders, including statements about loop qualification.[1742] No commenters have put forth alternative definitions or

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[1737] *UNE Remand Order*, 15 FCC Rcd at 3884, para. 425.

[1738] Loop qualification information identifies the physical attributes of the loop plant (such as loop length, the presence of load coils and bridge taps, and the presence and type of Digital Loop Carrier) that enable carriers to determine whether the loop is capable of supporting xDSL and other advanced technologies. *Id.* at 3885, para. 426.

[1739] *Local Competition Order*, 11 FCC Rcd at 15763, para. 516; *UNE Remand Order*, 15 FCC Rcd at 3887, para. 433.

[1740] *See UNE Remand Order*, 15 FCC Rcd at 3887, para. 433.

[1741] *Triennial Review NPRM*, 16 FCC Rcd at 22811, para. 64.

[1742] *See UNE Remand Order*, 15 FCC Rcd at 3884-87, paras 425-31.

modifications to our existing definition. We further find that competitive LECs providing qualifying services continue to be impaired on a national basis without access to OSS. Accordingly, we require incumbent LECs to continue to provide unbundled access to OSS. This requirement includes an ongoing obligation on the incumbent LECs to make modifications to existing OSS as necessary to offer competitive carriers nondiscriminatory access and to ensure that the incumbent LEC complies with all of its network element, resale and interconnection obligations in a nondiscriminatory manner—including any new obligations established in this Order.[1743] We note that even the incumbent LECs have not argued against OSS continuing to be available as a UNE.[1744]

563. Commenters in this proceeding generally agree that OSS functions must remain available to competitive carriers as UNEs.[1745] Competitive LECs contend that no substitutable alternative market for OSS has developed because the incumbent LECs retain access to exclusive information and functionalities required to provide OSS services.[1746] Indeed, competitive LECs assert that access to all five OSS functions the Commission has identified in addition to the business processes associated with the change management procedures are essential to ensure that competitive LECs are not impaired without access to these functions.[1747] We agree with these

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[1743] *See infra* Parts VI.B.1.d.(i) and VI.B.5. In these sections, we note modifications that incumbent LECs must make to their OSS in order to comply with unbundling obligations specified in this Order.

[1744] *See, e.g.*, SBC Reply at 167.

[1745] *See, e.g.*, ALTS *et al.* Comments at 77-80; Sprint Comments at 51-52; WorldCom Comments at 129-33; AT&T Comments at 240-41; Allegiance Comments at 37-38; Covad Comments at 74-77.

[1746] *See* Allegiance Comments at 37-38; Covad Comment at 75; ALTS *et al.* Comments at 78-79.

[1747] WorldCom Comments at 131.

commenters and conclude that, to the extent a competitive LEC is providing a qualifying service it is entitled to access the incumbent LEC's OSS to offer that service.

564. In reaching this conclusion, we find that the systems, databases, and personnel that the incumbent LEC uses to provide OSS functions represent an extensive infrastructure that would be difficult, if not impossible, for competitors to duplicate. Indeed, there is no evidence in the record that any competitive LEC has been able to successfully self-provision OSS functions, and there is no evidence of any alternative providers available. Accordingly, because these systems, databases and personnel are under the exclusive control of the incumbent LEC and are necessary for competitors effectively to access network elements, resell incumbent LEC services and interconnect with the incumbent LEC, we find that competitive LECs are impaired without access to incumbent LECs' OSS.

565. Although the specific systems, databases and personnel used to provide OSS functions may vary by incumbent LEC and by state, the OSS functions as defined apply universally for all incumbent LECs and there is no evidence in the record that would suggest a more geographically disaggregated approach to our OSS unbundling requirement. We therefore adopt an unbundling requirement for OSS functions on a national basis.

566. However, we recognize the wide variety of systems and databases that comprise the OSS of incumbent LECs, and the important role that state commissions have played in facilitating access to incumbent LEC OSS through the section 271 process and other state proceedings. Although our determination that OSS for qualifying services must continue to be unbundled is a national rule, we expect that states will continue their important role in working with the incumbent LECs and competitive LECs to ensure that competitors obtain necessary access to the particular incumbent LEC OSS

systems in each state for the qualifying services.[1748] In addition, our conclusions apply equally to the mass market and the enterprise market. Because there are no alternative OSS providers and competitive LECs are impaired without access to OSS, whether the customers are mass market or enterprise, we find that there is no reason to distinguish between such markets in establishing the availability of OSS as a UNE.

567. SBC, however, urges the Commission to clarify that incumbent LECs do not need to provide direct access to back office systems.[1749] SBC suggests that, under the approach taken in the *UNE Remand Order*, an incumbent LEC may satisfy its obligations with respect to loop qualification information by providing carriers with the same underlying information that it has in any of its own databases or internal records without offering direct access to those records.[1750] We agree, and note that this conclusion was recently reflected in our *Qwest 9-State Order*, in which we held that Qwest was

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[1748] Along those lines, we reject Illuminet's request that we require all incumbent LECs to standardize their OSS functionalities and specifically their pre-ordering processes. Illuminet Comments at 9. The Act does not require nationwide uniformity among all incumbent LECs. We also note that in most states, BOCs' OSS processes have already been subject to third-party testing and state commission review, and we decline to require the substantial modifications to such systems necessary to achieve uniformity.

[1749] SBC claims that back office systems may contain proprietary information about other competitive LEC facilities, and other highly sensitive information. SBC suggests that such information is not "necessary" for competitive carriers to compete, and thus suggests that competitive LECs should not be allowed direct access to systems and databases containing such information. *See* SBC Reply at 168.

[1750] *Id.* at 168-69.

not required to permit competitive LECs direct access to its back office loop qualification database.[1751]

568. Covad also argues that incumbent LECs should modify their OSS to provide certain additional information related to certain facilities and network elements, consistent with its view of the facilities and network elements it is entitled to access under section 251.[1752] For example, Covad asks that we expressly mandate access to a wide range of information related to remote terminal feature availability.[1753] Because we do not adopt Covad's approach to unbundling, we recognize that Covad may not require all of the information it describes in its Comments. We thus decline to reach the level of detail requested by Covad or change our approach to OSS and loop qualification information, but note that Covad remains entitled on a going-forward basis to nondiscriminatory access to OSS as defined herein.

VII. SCOPE OF UNBUNDLING OBLIGATIONS

A. Combinations of Network Elements

1. Background

569. In the *Local Competition Order*, the Commission adopted rules that prohibited incumbent LECs from

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[1751] *Qwest 9-State 271 Order*, 17 FCC Rcd at 26317, para. 29. In addition, to the extent that Bell Atlantic requested the same clarification, we grant their request. *See* Verizon Feb. 17, 2000 Petition for Reconsideration at 15-17.

[1752] Covad Comments at 76-77. We therefore deny WorldCom's request to adopt additional rules stating specific characteristics of the local loop plant that incumbent LECs must disclose to requesting carriers. MCI WorldCom Feb. 17, 2000 Petition for Reconsideration at 23-24.

[1753] Covad Comments at 76-77. (arguing that it is entitled to information about the software versions and channel units used in each remote terminal).

separating network elements that ordinarily are combined.[1754] In addition, the Commission adopted rules requiring incumbent LECs to provide combinations of UNEs when requested by competitive LECs and to perform the necessary functions to make such combinations available.[1755] After various appeals before the Eighth Circuit, the Supreme Court addressed both requirements. First, in *Iowa Utilities Board*, the Court reinstated the Commission's rules prohibiting incumbent LECs from separating network elements ordinarily combined.[1756] Second, in *Verizon*, the Court reversed the vacatur of sections 51.315(c) through 51.315(f), which required incumbent LECs to provide UNE combinations and perform the necessary functions involved with that process.[1757] Specifically, *Verizon* concluded that the Commission's rules reflected a reasonable reading of section 251(c)(3) intended to remove practical barriers to competitive entry into the local exchange market.[1758]

570. In the *UNE Remand Order*, the Commission required incumbent LECs to provide EELs (*i.e.*, a particular combination of network elements) pursuant to section 51.315(b) of the Commission's rules, which prohibits incumbent LECs from separating currently combined network elements before providing them to requesting carriers.[1759] At

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[1754] *Local Competition Order*, 11 FCC Rcd at 15646-47, paras. 292-93; 47 C.F.R. § 51.315(b).

[1755] *Local Competition Order*, 11 FCC Rcd at 15647-48, paras. 294-97.

[1756] *Iowa Utils. Bd.*, 525 U.S. at 391-96.

[1757] The Eighth Circuit subsequently reinstated the rules. *Iowa Utils. Bd. v. FCC*, 301 F.3d 957.

[1758] *Verizon*, 535 U.S. at 531-38.

[1759] The Commission explained that because incumbent LECs may not separate loop and transport elements that are currently combined and purchased through their special access tariffs, competitive LECs are

the same time, the Commission recognized and explored significant legal and policy issues surrounding the use of EELs and the Commission's universal service and access charge rules. Shortly after the release of the *UNE Remand Order*, the Commission issued the *Supplemental Order* in which it established an interim usage requirement related to EELs while considering the legal and policy issues implicated by making EELs available. In particular, the Commission determined that competitive LECs must provide a "significant amount of local exchange service" to a particular customer in order to use an EEL.[1760] In the *Supplemental Order Clarification*, the Commission clarified the "significant amount of local usage" requirement and established three safe harbors to define the term.[1761] The Commission also adopted the commingling restriction, which prevented a requesting carrier from connecting a loop or EEL to tariffed access services used as interoffice transmission facilities.[1762] In October 2002, the D.C. Circuit resolved CompTel's appeal of the *Supplemental Order Clarification*. In *CompTel*, the court found that CompTel had not demonstrated that the *Supplemental Order Clarification*'s commingling restriction was arbitrary and capricious.[1763]

571. In the *Notice*, the Commission sought comment on issues related to the EEL, which is a UNE combination consisting of an unbundled loop and dedicated transport and

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entitled to obtain these existing loop-transport combinations at UNE prices. *UNE Remand Order*, 15 RCC Rcd at 3909, para. 480.

[1760] *Supplemental Order*, 15 FCC Rcd at 1761, para. 4.

[1761] *Supplemental Order Clarification*, 15 FCC Rcd at 9598-9600, para. 22.

[1762] *Id.* at 9598-9600, 9602, paras. 22, 28; *see, e.g., Net2000 Communications, Inc. v. Verizon—Washington, D.C., Inc.*, File No. EB-00-018, Memorandum Opinion and Order, 17 FCC Rcd 1150, 1159, paras. 29-30 (2001).

[1763] *CompTel*, 309 F.3d at 17-18.

may sometimes include additional electronics (*e.g.*, multiplexing equipment). In particular, the Commission sought comment on whether offering EELs is an appropriate precondition to the switching carve-out adopted in the *UNE Remand Order*, whether the availability of EELs serves to address impairment in the absence of unbundled switching, and whether certain EELs-related issues (*e.g.*, use restrictions, commingling) warrant revision in light of industry developments since the release of the *UNE Remand Order*.[1764] In addition, the Commission incorporated the record related to these issues from earlier proceedings.[1765]

2. Discussion

572. In this section, we address our rules for UNE combinations, specific issues pertaining to EELs, the ability of requesting carriers to commingle UNEs and UNE combinations with other wholesale services, issues surrounding conversions of access services to UNEs.

a. New Combinations of Unbundled Network Elements

573. We reaffirm our existing rules regarding UNE combinations.[1766] Our rules require incumbent LECs to provide UNE combinations upon request and prohibit incumbent LECs from separating UNE combinations that are ordinarily combined except upon request. Section 251(c)(3) requires incumbent LECs to "provide unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide" a

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[1764] *Triennial Review NPRM*, 16 FCC Rcd at 22807-08, 22814-15, paras. 57, 60, 73.

[1765] *Id.* at 22814, para. 72.

[1766] 47 C.F.R. § 51.315.

telecommunications service.[1767] As noted in the Supreme Court's *Verizon* decision, the statute does not specify which party must perform the functions necessary to effectuate UNE combinations.[1768] Based on the nondiscrimination requirements of section 251(c)(3),[1769] and because incumbent LECs are in the best position to perform the functions necessary to provide UNE combinations (and to separate UNE combinations upon request) through their control of the elements of their networks that are unbundled, our rules require incumbent LECs to provide UNE combinations upon request. The record does not indicate that these recently-reinstated rules are problematic.

574. We reiterate the conditions that apply to the duty of incumbent LECs to provide UNE combinations upon request, *i.e.*, that such a combination must be technically feasible and must not undermine the ability of other carriers to access UNEs or interconnect with the incumbent LEC's network.[1770] As noted in the *Verizon* decision, the limitation on technical feasibility is meant to preserve the reliability and security of the incumbent LEC's network, and a UNE combination is "not technically feasible if it impedes an incumbent carrier's ability to retain responsibility for the management, control,

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[1767] 47 U.S.C. § 251(c)(3); *Local Competition Order*, 11 FCC Rcd at 15646-48, paras. 292-97; *see* LDMI Comments at 11; NewSouth Comments at 42-46; Norlight Comments at 5-7; OpenBand Comments at 10-12; Sprint Comments at 26-27; UNE-P Coalition Comments at 35-38; Letter from Joan Marsh, Director, AT&T Corp. to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2, 6-7 (filed Dec. 23, 2002) (AT&T Dec. 23, 2002 EELs and New Combinations *Ex Parte* Letter).

[1768] *Verizon*, 535 U.S. at 534 (reading section 251(c)(3) as "leaving open who should do the work of combination.").

[1769] *Id.* at 537-38 (noting the statutory requirement of nondiscriminatory access); *Iowa Utils. Bd.*, 525 U.S. at 394-95 (discussing section 251(c)(3) nondiscrimination requirements).

[1770] 47 C.F.R. § 51.315(c).

and performance of its own network."[1771] Incumbent LECs must prove to state commissions that a request to combine UNEs in a particular manner is not technically feasible or would undermine the ability of other carriers to obtain access to UNEs or to interconnect with the incumbent LEC's network.[1772]

b. EELs

575. As noted above, our rules currently require incumbent LECs to make UNE combinations, including loop-transport combinations, available in all areas where the underlying UNEs are available and in all instances where the requesting carrier meets the eligibility requirements.[1773] We decline to designate EELs as additional UNEs for which an impairment analysis is necessary. Instead, we continue to view EELs as UNE combinations consisting of unbundled loops and unbundled transport (with or without multiplexing capabilities). Pursuant to the statute, requesting carriers are entitled to nondiscriminatory access to UNE combinations on just, reasonable, and nondiscriminatory rates, terms and conditions. Apart from the service eligibility criteria for high-capacity (DS1 or DS3) EELs set forth in Part VII below, our rules do not permit incumbent LECs to impose additional conditions or limitations upon obtaining access to EELs and

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[1771] *Verizon*, 535 U.S. at 536 (citing *Local Competition Order*, 11 FCC Rcd at 15605-06, para. 203).

[1772] 47 C.F.R. § 51.315(e), (f). We note that our prior rules used the word "impair" in defining an incumbent LEC's obligations to provide UNE combinations upon request. *See* 47 C.F.R. §§ 51.315(c), (f). To avoid confusion between the standard under these rules and the impairment standard in section 251(d)(2)(B) of the Act, we amend these rules to eliminate this use of "impair." *See infra* App. B.

[1773] *Local Competition Order*, 11 FCC Rcd at 1646-48, paras. 292-97; *Verizon*, 535 U.S. at 531-38 (upholding the Commission's rules on UNE combinations). *See USTA*, 290 F.3d at 428 (concluding that "the Commission has the authority to require [loop-transport] combinations, affirmatively"); *see also* AT&T Reply at 299; XO Reply at 5-7.

other UNE combinations, such as requiring a competitive LEC to purchase special access and then convert such facilities to UNEs.[1774] Thus, to the extent DS1 transport facilities are available along a specific route, for example, the incumbent LEC must provide (upon request) a DS1 EEL consisting of unbundled loop and unbundled transport facilities to any requesting carrier that qualifies for access to that combination.[1775] Similarly, if desired, a competitive LEC could obtain access to a DS0 EEL so long as the underlying UNEs are available pursuant to our impairment analysis.[1776]

576. Based on the record before us, we conclude that EELs facilitate the growth of facilities-based competition in the local market.[1777] The availability of EELs extends the

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[1774] *See* ALTS *et al.* Comments at 102; AT&T Comments at 105-06 (asserting that incumbent LECs require pre-auditing); BrahmaCom Reply at 2 (arguing that incumbent LECs impose a conversion requirement on EELs); Focal Apr. 5, 2001 Comments at 5-6; Letter from Thomas Jones, Counsel for Conversent. to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4 (filed Nov. 5, 2002) (Conversent Nov. 5, 2002 Transport and Loops *Ex Parte* Letter). We therefore grant CompTel's request to clarify that requesting carriers need not purchase special access circuits in order to qualify for EELs. CompTel Feb. 17, 2000 Petition for Reconsideration. We deny, however, CompTel's request to specify the EEL as an additional network element. *Id.* at 13-14. In addition, in light of our determination herein regarding EELs, we dismiss as moot WorldCom's petition for clarification regarding the proper interpretation of section 51.315(b) of the Commission's rules. MCI WorldCom Feb. 17, 2000 Petition for Clarification at 2, 13.

[1775] *See infra* Part V.B.; *see also* BellSouth Reply at 22.

[1776] WorldCom Nov. 13, 2002 *Ex Parte* Letter at 1-3 (describing DS0 EEL arrangements); Letter from William Jordan, Vice President, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Nov. 25, 2002) (BellSouth Nov. 25, 2002 EELs *Ex Parte* Letter) (describing BellSouth's EEL offerings).

[1777] ALTS *et al.* Comments at 76-77; AT&T Comments at 99, 203; Letter from Julia O. Strow, Vice President, Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, 01-318,

geographic reach for competitive LECs because EELs enable requesting carriers to serve customers by extending a customer's loop from the end office serving that customer to a different end office in which the competitive LEC is already located. In this way, EELs also allow competitive LECs to reduce their collocation costs by aggregating loops at fewer collocation locations and then transporting the customer's traffic to their own switches. Moreover, we find that access to EELs also promotes self-deployment of interoffice transport facilities by competitive LECs because such carriers will eventually self-provision transport facilities to accommodate growing demand.[1778] We further agree that the availability of EELs and other UNE combinations promotes innovation because competitive LECs can provide advanced switching capabilities in conjunction with loop-transport combinations.[1779]

577. As discussed below, a competitive LEC must meet the eligibility criteria in order to obtain a high-capacity EEL on an unbundled basis.[1780] On a going-forward basis, a

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01-321 at 1-2 (filed Dec. 16, 2002) (Cbeyond Dec. 16, 2002 EELs *Ex Parte* Letter).

[1778] AT&T Reply at 252; NewSouth Comments at 14-15 (explaining practices implemented to make network more efficient).

[1779] Letter from Patrick J. Donovan, Counsel for Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1-2 (filed Dec. 16, 2002) (Cbeyond Dec. 16, 2002 *Ex Parte* Letter); BroadRiver Apr. 5, 2001 Comments at 5 (arguing that EEL availability will "accelerate the rollout of next generation networks"); WorldCom Apr. 5, 2001 Comments at 28-29 (arguing that EEL availability promotes innovation).

[1780] *See infra* Part VII.B.; *see also* AT&T Comments at 104-05; AT&T Reply, Tab F, Declaration of Michael E. Lesher (AT&T Lesher Reply Decl.) at para. 33; CompTel Comments at 90-95; CompTel Apr. 30, 2001 Reply at 2-4. AT&T Apr. 5, 2001 Comment at 20. *But see* SBC Reply at 67-69. *See, e.g.*, Letter from Ann D. Berkowitz, Project Manager, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 at 13 (filed Oct. 16, 2002) (Verizon Oct. 16, 2002 Section 251

requesting carrier may obtain a high-capacity EEL any time the underlying network elements are available pursuant to our impairment analysis and the carrier meets the eligibility criteria.[1781] We conclude that pre-audits and requirements to purchase special access and then convert to UNE combinations constitute unjust, unreasonable, and discriminatory terms and conditions for obtaining access to UNE combinations and are prohibited by the Act and our rules.[1782]

578. We decline to link the availability of EELs and other UNE combinations to our analysis in the *Pricing Flexibility Order*.[1783] Because the comprehensive impairment analysis

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Obligations *Ex Parte* Letter) (arguing that the Commission should limit the use of UNEs to providing local service).

[1781] Thus, a requesting carrier may obtain access to a "new" EEL or other UNE combination. *See* BroadRiver Apr. 5, 2001 Comments at 16-19 (arguing that the Commission should allow competitive LECs to obtain access to new EELs).

[1782] 47 U.S.C. §§ 201-202, 251(c)(3); 47 C.F.R. §§ 51.311-.315. *See* XO Reply at 7 (arguing that competitive LECs may obtain EELs without conversion requirements); Cbeyond Apr. 5, 2001 Comments at 6-9 (arguing that incumbent LECs have required compliance audits before providing access to a UNE combination); Focal Apr. 30, 2001 Reply at 6.

We note that, because the Eighth Circuit had vacated our rules concerning new combinations, competitive LECs could obtain access to EELs through a conversion process under section 51.315(b) of our rules, which prohibited incumbent LECs from separating network elements ordinarily combined. In light of *Verizon*, our new combinations rules were reinstated, and thus, competitive LECs may order new UNE combinations and need not convert special access (or other previously combined network elements) to UNE combinations. *See Verizon*, 535 U.S. at 531-38 (upholding the Commission's rules on UNE combinations).

[1783] Qwest Reply at 56-57. We note that Qwest later modified its position to support the availability of EELs. *See* Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 15-17 (filed Dec. 17, 2002) (Qwest Dec. 17, 2002 *Ex Parte* Letter).

we adopt herein addresses the arguments of Qwest and other incumbent LECs concerning the availability of alternative transmission facilities, additional conditions are not necessary to determine the availability of EELs and other UNE combinations.

c. General Commingling Issues for Transmission Facilities

579. We eliminate the commingling restriction that the Commission adopted as part of the temporary constraints in the *Supplemental Order Clarification* and applied to stand-alone loops and EELs. We therefore modify our rules to affirmatively permit requesting carriers to commingle UNEs and combinations of UNEs with services (*e.g.*, switched and special access services offered pursuant to tariff), and to require incumbent LECs to perform the necessary functions to effectuate such commingling upon request. By commingling, we mean the connecting, attaching, or otherwise linking of a UNE, or a UNE combination, to one or more facilities or services that a requesting carrier has obtained at wholesale from an incumbent LEC pursuant to any method other than unbundling under section 251(c)(3) of the Act, or the combining of a UNE or UNE combination with one or more such wholesale services. Thus, an incumbent LEC shall permit a requesting telecommunications carrier to commingle a UNE or a UNE combination with one or more facilities or services that a requesting carrier has obtained at wholesale from an incumbent LEC pursuant to a method other than unbundling under section 251(c)(3) of the Act. In addition, upon request, an incumbent LEC shall perform the functions necessary to commingle a UNE or a UNE combination with one or more facilities or services that a requesting carrier has obtained at wholesale from an incumbent LEC pursuant to a method other than unbundling under section 251(c)(3) of the Act. As a result, competitive LECs may connect, combine, or otherwise attach UNEs and combinations of UNEs to wholesale services (*e.g.*, switched and special access services

offered pursuant to tariff), and incumbent LECs shall not deny access to UNEs and combinations of UNEs on the grounds that such facilities or services are somehow connected, combined, or otherwise attached to wholesale services.

580. As explained below, however, we do not require incumbent LECs to "ratchet"[1784] individual facilities. Thus, we do not require incumbent LECs to implement any changes to their billing or other systems necessary to bill a single circuit at multiple rates (*e.g.*, a DS3 circuit at rates based on special access services and UNEs) in order to charge competitive LECs a single, blended rate. Although we do not require ratcheting, we do note that incumbent LECs shall not deny access to a UNE on the ground that the UNE or UNE combination shares part of the incumbent LEC's network with access services or other non-qualifying services.[1785]

581. We conclude that the Act does not prohibit the commingling of UNEs and wholesale services and that section 251(c)(3) of the Act grants authority for the Commission to adopt rules to permit the commingling of UNEs and combinations of UNEs with wholesale services, including interstate access services. An incumbent LEC's wholesale services constitute one technically feasible method to provide nondiscriminatory access to UNEs and UNE

[1784] Ratcheting is a pricing mechanism that involves billing a single circuit at multiple rates to develop a single, blended rate.

[1785] More specifically, our approach to ratcheting does not mean that an incumbent LEC can refuse to commingle a UNE with a special access service because the incumbent LEC multiplexes traffic for multiple customers onto one facility within its own network. For example, an incumbent LEC shall not refuse to provide a UNE DS1 transport (where such UNEs are available) on the grounds that the UNE shares a transmission facility with tariffed access services or other wholesale services.

combinations.[1786] We agree with the Illinois Commission, the New York Department, and others that the commingling restriction puts competitive LECs at an unreasonable competitive disadvantage by forcing them either to operate two functionally equivalent networks—one network dedicated to local services and one dedicated to long distance and other services—or to choose between using UNEs and using more expensive special access services to serve their customers.[1787] Thus, we find that a restriction on com-

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[1786] *See* NewSouth Comments at 42-43 (describing connections and work processes); Qwest Dec. 17, 2002 *Ex Parte* Letter at 15-16 (proposing and describing EEL arrangements); Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4-6 (filed Dec. 18, 2002) (Qwest Dec. 18, 2002 EELs *Ex Parte* Letter) (describing Qwest's commingling proposal); Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (filed Feb. 6, 2003) (Qwest Feb. 6, 2003 EELs *Ex Parte* Letter) (describing Qwest's commingling proposal); AT&T Apr. 5, 2001 Comments at 22. In addition, we find that commingling is a technically feasible practice. *See, e.g.*, AT&T Apr. 30, 2001 Reply, CC Docket No. 96-98, Decl. of Anthony Fea and William J. Taggart III (AT&T Apr. 30, 2001 Fea/Taggart Reply Decl.) at para. 40 (asserting that linking loops or loop-transport combinations with high-capacity special access services is technically feasible). In light of the determinations we make herein, we grant WorldCom's request to clarify that requesting carriers may commingle UNEs with other types of services. MCI WorldCom Feb. 17, 2000 Petition for Clarification at 21-23.

[1787] In the *Local Competition Order*, the Commission concluded that those "terms require incumbent LECs to provide unbundled elements under terms and conditions that would provide an efficient competitor with a meaningful opportunity to compete." 11 FCC Rcd at 15660, para. 315; *see UNE Remand*, 15 FCC Rcd at 3913-14, paras. 490-91. A number of parties persuade us that a commingling restriction, combined with the reduced unbundling obligations, would raise the costs of competitive LECs. AT&T Comments at 106-107; ALTS *et al.* Comments at 106; CompTel Comments at 97; Illinois Commission Comments at 5; Sprint Comments at 55-57; WorldCom Comments at 55; AT&T Reply at 293 (citing AT&T Lesher Reply Decl. at paras. 34-36); NewSouth Reply at

mingling would constitute an "unjust and unreasonable practice" under 201 of the Act, as well as an "undue and unreasonable prejudice or advantage" under section 202 of

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37; Sprint Reply at 46; NuVox *et al.* Reply at 52; XO Reply at 17; Letter from Ruth Milkman, Counsel for WorldCom, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 13 (filed Oct. 7, 2002) (WorldCom Oct. 7, 2002 EELs *Ex Parte* Letter) (asserting that commingling "forces needless inefficiencies on competitors"); Letter from Michael H. Pryor, Counsel for NewSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98 (filed Oct. 18, 2002) (NewSouth Oct. 18, 2002 Loops and Commingling *Ex Parte* Letter); ALTS/CompTel Oct. 28, 2002 *Ex Parte* Letter at 5; Cbeyond Nov. 22, 2002 *Ex Parte* Letter; Letter from Jonathan Askin, General Counsel, ALTS, to William F. Maher, Chief, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 5 (filed Nov. 14, 2002) (ALTS Nov. 14, 2002 Use and Commingling Restrictions *Ex Parte* Letter); WorldCom Nov. 22, 2002 *Ex Parte* Letter at 13-14; AT&T Dec. 23, 2002 *Ex Parte* Letter at 8 (arguing that commingling restrictions force competitive LECs into inefficient network architectures); Letter from Ruth Milkman, Counsel for WorldCom, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (filed Feb. 13, 2003) (WorldCom Feb. 13, 2003 EELs *Ex Parte* Letter); Letter from Patrick Donovan, Counsel for Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338 at 4 (filed Feb. 13, 2003) (Cbeyond Feb. 13, 2003 EELs and Commingling *Ex Parte* Letter). *See* Cbeyond *et al.* Apr. 5, 2001 Comments at 14 (requesting clarification that competitive LECs can purchase access to a DS1 EEL that is "riding on a DS3 circuit with other types of ancillary traffic"); CompTel Apr. 5, 2001 Comments at 33; AT&T Apr. 30, 2001 Fea/Taggart Reply Decl. at paras. 41-42. We therefore disagree with Qwest and the other incumbent LECs who argue that the commingling restriction does not impede competitive LECs from deploying efficient network configurations. *See* SBC Comments at 108 (noting that commingling restriction precludes competitive LECs from obtaining UNEs and access services that share the same facility); BellSouth Reply at 40 (stating that competitive LECs can connect UNEs and access services at collocation arrangements); Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98 at 3 (filed Oct. 28, 2002) (Qwest Oct. 28, 2002 Transport and Commingling *Ex Parte* Letter).

the Act.[1788] Furthermore, we agree that restricting commingling would be inconsistent with the nondiscrimination requirement in section 251(c)(3).[1789] Incumbent LECs place no such restrictions on themselves for providing service to any customers by requiring, for example, two circuits to accommodate telecommunications traffic from a single customer or intermediate connections to network equipment in a collocation space.[1790] For these reasons, we require incumbent LECs to effectuate commingling by modifying their interstate access service tariffs to expressly permit connections with UNEs and UNE combinations.[1791]

[1788] ALTS *et al.* Comments at 105; ALTS/CompTel Oct. 28, 2002 *Ex Parte* Letter at 5; WorldCom Nov. 18, 2002 *Ex Parte* Letter at 15; Cbeyond Nov. 22, 2002 *Ex Parte* Letter at 13-14.

[1789] AT&T Comments at 107; Illinois Commission Comments at 5; WorldCom Reply at 32; ALTS/CompTel Oct. 28, 2002 *Ex Parte* Letter at 5; AT&T Nov. 23, 2002 *Ex Parte* Letter at 8 (arguing that commingling restriction is discriminatory).

[1790] AT&T Comments at 107 (arguing that "the co-mingling ban deprives CLECs of obtaining the same network efficiencies as the ILEC enjoys because the ILEC can place any traffic on any facility to maximize efficiency"); NewSouth Comments at 42-46; Sprint Reply at 46-48; WorldCom Apr. 30, 2001 Reply at 14; CompTel Apr. 5, 2001 Comments at 33; AT&T Apr. 30, 2001 Fea/Taggart Reply Decl. at paras. 41-42); *see* 47 C.F.R. § 51.315(b) (requiring incumbent LECs to provide access to UNEs on terms and conditions no less favorable to those under which the incumbent LEC provides such UNEs to itself). *But see* SBC Comments at 108 (noting requirement for competitive LECs to collocate in certain circumstances); Verizon Comments at 141 (acknowledging that it combines all telecommunications traffic on the same facilities); BellSouth Reply at 40 (acknowledging collocation requirement); *see* 47 C.F.R. § 51.315(b) (requiring incumbent LECs to provide access to UNEs on terms and conditions no less favorable to those under which the incumbent LECs provides such UNEs to itself).

[1791] We note that sections 202 and 203 of the Act provide specific penalties for noncompliance. *See* 47 U.S.C. §§ 202(c), 203(e). These amounts have been adjusted to $7,600 for each offense and $330 for each day of the continuance of the offense. 47 C.F.R. § 1.80(b)(4). Thus, any

582. We decline, however, to require "ratcheting," which is a pricing mechanism that involves billing a single circuit at multiple rates to develop a single, blended rate.[1792] The Commission's pricing rules for UNEs already ensure that competitive LECs are paying appropriate rates for UNEs and UNE combinations, and that incumbent LECs are adequately compensated for the use of their networks. To permit ratcheting would be to create an additional series of discounts for situations in which all parties' interests are already protected.[1793] Thus, our rules permit incumbent LECs to

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incumbent LEC policy or practice that has the effect of prohibiting commingling could subject the incumbent LEC to enforcement action for imposing an "undue or unreasonable prejudice or disadvantage" upon competitive LECs. In addition, the Commission's rules establish a five-year statute of limitations for violations of sections 202 and 203. *Id.* at § 1.80(c)(2).

[1792] CompTel Comments at 97-98 (citing *BellSouth Telecommunications, Inc. Part 69(g)(1) Public Interest Petition to Establish New Rate Elements for Switched Access Versions of BellSouth's SMARTGate Service and BellSouth SPA Managed Shared Network*, Memorandum Opinion and Order, 14 FCC Rcd 1838, 1839, para. 2, n.2 (CCB 1998) (*BellSouth Ratcheting Order*); Sprint Comments at 56, n.48; Sprint Reply at 47. As explained in the *BellSouth Ratcheting Order*, ratcheting allows special access charges to be reduced by 1/24th for each switched access voice-grade circuit on a special access DS1 or 1/672nd for each switched access voice-grade circuit on a special access DS3. *BellSouth Ratcheting Order*, 14 FCC Rcd at 1839 n.2. We note that some parties contend that any Commission rule requiring ratcheting would necessitate substantial modifications to incumbent LEC billing systems and operational procedures. *See* Letter from Glenn T. Reynolds, Vice President—Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Feb. 6, 2003) (BellSouth Feb. 6, 2003 Ratcheting *Ex Parte* Letter). Because we do not require ratcheting, however, we find no need to address these arguments.

[1793] Our decision not to require ratcheting does not affect a competitive LEC's ability to obtain UNEs, UNE combinations, and wholesale services. Thus, an incumbent LEC may not deny access to a UNE or UNE combination on the grounds that such UNE or UNE combination shares part of the incumbent LEC's network with access or

assess the rates for UNEs (or UNE combinations) commingled with tariffed access services on an element-by-element and a service-by-service basis.[1794] This ensures that competitive LECs do not obtain an unfair discount off the prices for wholesale services, while at the same time ensuring that competitive LECs do not pay twice for a single facility.[1795]

583. We therefore disagree with SBC, Verizon, and others who argue in favor of adopting a permanent commingling restriction. First, we determine that the eligibility qualifications adopted herein (and applied to all conversions of a special access circuit to a high-capacity EEL; to obtaining a new high-capacity EEL; and to obtaining at UNE pricing part of a high-capacity loop-transport combination)

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other non-UNE services. Some competitive LECs have contended, for example, that incumbent LECs deny access to UNE combinations on the grounds that a UNE and access service share certain multiplexing equipment. *See* Letter from Brad E. Mutschelknaus *et al.*, Counsel for ALTS *et al.*, to Dorothy Attwood, Chief, Common Carrier Bureau, FCC, CC Docket No. 96-98 (filed Aug. 1, 2001) (ALTS Aug. 1, 2001 EELs *Ex Parte* Letter), *in* Letter from Steven A. Augustino, Counsel for ALTS *et al.*, to Magalie Roman Salas, Secretary, FCC, CC Docket No. 96-98 (filed Aug. 1, 2001). By eliminating the commingling restriction, we will ensure that competitive LECs will be able to obtain all available UNEs, UNE combinations, and wholesale services, albeit at the rates established pursuant to tariffs, interconnection agreements or other contracts.

[1794] *See infra* Part VII.B.

[1795] For example, a competitive LEC connecting a UNE loop to special access interoffice transport facilities would pay UNE rates for the unbundled loops and tariffed rates for the special access service. We recognize that, at some point, competitive LECs may make a business decision to either use UNEs or wholesale services to serve a customer. For example, a competitive LEC buying UNE DS1 transport continues to add UNE DS1 transport facilities to its network. At some point, the competitive LEC will make a business decision to either buy DS3 special access (and convert its traffic onto the larger facility) or to buy UNE DS3 transport, where available and if the competitive LEC meets the service eligibility requirements.

address the universal service and access charge arguments by ensuring competitive LECs purchase UNEs for legitimate competitive purposes.[1796] Second, we conclude that the commingling restriction is no longer necessary to preserve the status quo while the Commission grapples with potential modifications to its universal service and access charge policies.[1797] We recognize that some issues remain outstanding, but we conclude that the remaining issues do not, by themselves, warrant a permanent restriction on commingling UNEs and UNE combinations with wholesale services. Third, we find that commingling does not constitute the creation of a new UNE for which an impairment analysis is required.[1798] Instead, commingling allows a competitive LEC to connect or attach a UNE or UNE combination with an interstate access service, such as high-capacity multiplexing or transport services. Because commingling will not enable a competitive LEC to obtain reduced or discounted prices on tariffed special access services because we are not requiring ratcheting,[1799] our general impairment analysis for individual

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[1796] AT&T Reply at 284; WorldCom Reply at 36. *But see* SBC Comments at 107; NECA Reply at 4-5.

[1797] ALTS *et al.* Comments at 105-06; CompTel Comments at 76-77; NuVox *et al.* Comments at 49-51 (citing *CALLS* and *MAG* Orders); Norlight Comments at 9-10; AT&T Reply at 284, 290; WorldCom Reply at 36; Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 13 (filed Oct. 7, 2002) (AT&T Oct. 7, 2002 Transport and Commingling *Ex Parte* Letter); 13; Nov. 14, 2002 ALTS *Ex Parte* Letter at 3, 5. *But see* NECA Reply at 3; NECA Apr. 5, 2001 Comments at 3-5; TDS Apr. 5, 2001 Comments at 1-7; USTA Apr. 5, 2001 Comments at 9-11.

[1798] Letter from Brad E. Mutschelknaus, Counsel for ALTS, to Magalie Roman Salas, Secretary, FCC, CC Docket No. 96-98 at 3-5 (filed Aug. 20, 2001) (ALTS Aug. 20, 2001 EELs *Ex Parte* Letter); SBC/Verizon Apr. 5, 2001 Comments at 30.

[1799] As discussed below, we are not requiring incumbent LECs to blend the rates of a transmission facility according to the amount of UNE

UNEs is adequate. Fourth, we conclude that permitting commingling is consistent with the D.C. Circuit's *CompTel* decision. Verizon incorrectly characterizes that decision as finding that a commingling restriction is necessary because its absence would allow mass conversions.[1800] Instead, the court concluded that, based on the information submitted by the parties, it could not conclude that the Commission's prior commingling restriction was arbitrary and capricious.[1801] Further, as we explain in detail below, we obviate the risk identified by the court by applying service eligibility criteria to commingled loop-transport combinations. Finally, we conclude that the billing and operational issues raised by Verizon do not warrant a permanent commingling restriction, but instead can be addressed through the same process that applies for other changes in our unbundling requirements adopted herein, *i.e.*, through change of law provisions in interconnection agreements.[1802] We expect that change of law

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usage and access service usage. Thus, competitive LECs that commingle UNEs or UNE combinations with, for example, interstate access services would pay the appropriate rates for each service.

[1800] Verizon Dec. 17, 2002 *Ex Parte* Letter at 5; Letter from Ann D. Berkowitz, Project Manager, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Jan. 30, 2003); Letter from Ann D. Berkowitz, Project Manager, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 2-3 (filed Feb 6, 2003).

[1801] *CompTel*, 309 F.3d at 17-18.

[1802] CompTel Comments at 97-98; NewSouth Comments at 41; Sprint Comments at 56; WorldCom Reply at 33-34; Sprint Reply at 47. *But see* Verizon Comments at 140. We note that, taken to its extreme, the incumbent LEC argument would prevent any modification of our UNE rules because billing and operational changes would certainly follow any such change.

provisions will afford incumbent LECs sufficient time to complete all actions necessary to permit commingling.[1803]

584. As a final matter, we require that incumbent LECs permit commingling of UNEs and UNE combinations with other wholesale facilities and services, including any services offered for resale pursuant to section 251(c)(4) of the Act. Section 251(c)(4) places the duty on incumbent LECs "not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on" the resale of telecommunications services provided at retail to customers who are not telecommunications carriers.[1804] Any restriction that prevents commingling of UNEs (or UNE combinations) with resold services constitutes a limitation on both reselling the eligible service and on obtaining access to the UNE or UNE combination. We conclude that a restriction on commingling UNEs and UNE combinations with services eligible for resale is inconsistent with the section 251(c)(4) prohibition on "unreasonable . . . conditions or limitations" because it would impose additional costs on competitive LECs choosing to compete through multiple entry strategies, and because such a restriction could even require a competitive LEC to forego using efficient strategies for serving different customers and markets. We agree with ALTS that an incumbent LEC's obligations under sections 251(c)(3) and 251(c)(4) are not mutually exclusive.[1805] In addition, a restriction on obtaining UNEs and UNE combinations in conjunction with services available for resale would constitute a discriminatory condition on the resale of eligible telecommunications services because incumbent LECs impose no such limitations or restrictions on their ability to combine facilities and

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[1803] For example, incumbent LECs will have to modify their interstate tariffed offerings to permit commingling of interstate access services with UNEs and UNE combinations.

[1804] 47 U.S.C. § 251(c)(4).

[1805] ALTS *et al.* Comments at 98.

services within their network in order to meet customer needs.[1806]

d. Conversions

585. We decline the suggestions of several parties to adopt rules establishing specific procedures and processes that incumbent LECs and competitive LECs must follow to convert wholesale services (*e.g.*, special access services offered pursuant to interstate tariff) to UNEs or UNE combinations, and the reverse, *i.e.*, converting UNEs or UNE combinations to wholesale services.[1807] Because both the incumbent LEC and requesting carriers have an incentive to ensure correct payment for services rendered, and because both parties are bound by duties to negotiate in good faith, we conclude that these carriers can establish any necessary procedures to perform conversions with minimal guidance on our part.

586. We conclude that carriers may both convert UNEs and UNE combinations to wholesale services and convert wholesale services to UNEs and UNE combinations, so long as the competitive LEC meets the eligibility criteria that may be applicable. To the extent a competitive LEC fails to meet the eligibility criteria for serving a particular customer, the

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[1806] *See, e.g.*, AT&T Comments at 107; NewSouth Comments at 42-46; Sprint Reply at 46-48.

[1807] *See* ALTS *et al.* Comments at 101 (arguing that the Commission should establish explicit time period for effectuating conversions); Focal Apr. 30, 2001 Reply at 6-7. We therefore grant in part WorldCom's request to clarify that competitive LECs may convert existing special access services to combinations of loop and transport network elements, but only to the extent such conversions meet the service eligibility criteria for EELs adopted herein. MCI WorldCom Feb. 17, 2000 Petition for Clarification at 24. Furthermore, we dismiss as moot Intermedia's request to issue another supplementary order clarifying that incumbent LECs must make available loop and transport network elements that are currently combined as tariffed special access services. Intermedia Feb. 17, 2000 Petition for Reconsideration at 14-15.

serving incumbent LEC may convert the UNE or UNE combination to the equivalent wholesale service in accordance with the procedures established between the parties. Likewise, to the extent a competitive LEC meets the eligibility requirements and a particular network element is available as a UNE pursuant to our impairment analysis, it may convert the wholesale service used to serve a customer to UNEs or UNE combinations in accordance with the relevant procedures. Converting between wholesale services and UNEs or UNE combinations should be a seamless process that does not affect the customer's perception of service quality.[1808] We recognize that conversions may increase the risk of service disruptions to competitive LEC customers because they often require a competitive LEC to groom interexchange traffic off circuits and equipment that are already in use in order to comply with the eligibility criteria.[1809] Thus, requesting carriers should establish and abide by any necessary operational procedures to ensure customer service quality is not affected by conversions.

587. We decline to require incumbent LECs provide requesting carriers an opportunity to supersede or dissolve existing contractual arrangements through a conversion request. Thus, to the extent a competitive LEC enters into a long-term contract to receive discounted special access services, such competitive LEC cannot dissolve the long-term

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[1808] We note that no party seriously contends that it is technically infeasible to convert UNEs and UNE combinations to wholesale services and vice versa.

[1809] WorldCom explains that the grooming process requires "submission of circuit-level disconnect orders, and circuit-level reconnect orders" during limited periods of time in order to segregate telecommunications traffic onto the redundant facilities required by the commingling restriction. WorldCom Apr. 5, 2001 Comments at 37-38. *See* ALTS *et al.* Comments at 105 (arguing that "force moves" are inefficient and risky); AT&T Comments at 108 (citing AT&T Apr. 5, 2001 Comments at 22); Sprint Reply at 46-48.

contract based on a future decision to convert the relevant circuits to UNE combinations based on changes in customer usage.[1810] We recognize, however, that once a competitive LEC starts serving a customer, there exists a risk of wasteful and unnecessary charges, such as termination charges, re-connect and disconnect fees, or non-recurring charges associated with establishing a service for the first time. We agree that such charges could deter legitimate conversions from wholesale services to UNEs or UNE combinations, or could unjustly enrich an incumbent LEC as a result of converting a UNE or UNE combination to a wholesale service.[1811] Because incumbent LECs are never required to perform a conversion in order to continue serving their own customers, we conclude that such charges are inconsistent with an incumbent LEC's duty to provide nondiscriminatory access to UNEs and UNE combinations on just, reasonable, and nondiscriminatory rates, terms, and conditions.[1812] Moreover, we conclude that such charges are inconsistent with section 202 of the Act, which prohibits carriers from subjecting any person or class of persons (*e.g.*, competitive LECs purchasing UNEs or UNE combinations) to any undue or unreasonable prejudice or disadvantage.[1813]

588. We conclude that conversions should be performed in an expeditious manner in order to minimize the risk of incorrect payments. We expect carriers to establish any necessary timeframes to perform conversions in their interconnection agreements or other contracts. We decline to

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[1810] We would expect competitive LECs to take into account the possibility of future conversions to UNE combinations before entering into a long-term contract (with associated discounts) for wholesale services.

[1811] AT&T Reply at 296-300; AT&T Nov. 23, 2002 *Ex Parte* Letter at 12-13.

[1812] 47 U.S.C. § 251(c)(3).

[1813] *Id.* § 202(a).

adopt ALTS's suggestion to require the completion of all necessary billing changes within ten days of a request to perform a conversion because such time frames are better established through negotiations between incumbent LECs and requesting carriers.[1814] We recognize, however, that converting between wholesale services and UNEs (or UNE combinations) is largely a billing function. We therefore expect carriers to establish appropriate mechanisms to remit the correct payment after the conversion request, such as providing that any pricing changes start the next billing cycle following the conversion request.

589. As a final matter, we decline to require retroactive billing to any time before the effective date of this Order. The eligibility criteria we adopt in this Order supersede the safe harbors that applied to EEL conversions in the past. To the extent pending requests have not been converted, however, competitive LECs are entitled to the appropriate pricing up to the effective date of this Order.

B. Service Eligibility to Access UNEs

1. Background

590. A requesting carrier may obtain a UNE where it provides qualifying services over that UNE.[1815] In the *Local Competition Order* and *UNE Remand Order*, the Commission determined not to impose eligibility thresholds for UNE access.[1816] In the *Supplemental Order*, it restricted the ability of competitive carriers to convert special access arrangements to EELs, unless such a carrier provides a "significant amount of local exchange services."[1817] In the *Supplemental Order*

[1814] ALTS *et al.* Comments at 101.

[1815] *See supra* Part V.B.2.c.

[1816] *Local Competition Order*, 11 FCC Rcd at 15679, para. 356; *UNE Remand Order*, 15 FCC Rcd at 3911-12, para. 484.

[1817] *Supplemental Order*, 15 FCC Rcd at 1760, para. 2.

Clarification, the Commission clarified what constitutes a "significant amount of local exchange service" by defining three safe harbors for requesting carriers to demonstrate local usage to convert special access arrangements to EELs, two of which specified in detail a variety of local voice traffic requirements by circuit.[1818] In the *Triennial Review NPRM*, the Commission sought comment on several issues relating to the safe harbors, including whether they effectively tailor access to EEL combinations to those requesting carriers seeking to provide "significant local usage" to their end users.[1819] Since the issuance of the *Triennial Review NPRM*,

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[1818] The safe harbor exceptions require, in relevant part, that:

(1) the requesting carrier certifies it is the exclusive provider of an end user's local exchange service;

(2) the requesting carrier certifies that it provides local exchange and exchange access service to the end-user customer's premises and handles at least one third of the end-user customer's local traffic as measured as a percent of total end-user dialtone lines; for DS1 circuits and above, at least 50 percent of the activated channels on the loop portion of the loop-transport combination have at least 5 percent local voice traffic individually, and the entire loop facility has at least 10 percent local voice traffic; or

(3) the requesting carrier certifies that at least 50 percent of the activated channels on a circuit are used to provide originating and terminating local dialtone service and at least 50 percent of the traffic on each of these channels is local voice traffic and the entire loop facility has at least 33 percent local voice traffic.

Options (1) and (2) also require that the loop-transport combinations in question terminate at the requesting carrier's collocation arrangement in at least one incumbent LEC central office. For DS1 to DS3 multiplexing, each of the individual DS1 circuits must meet these criteria. *Supplemental Order Clarification*, 15 FCC Rcd at 9598-600, para. 22. All three options prohibited commingling EELs with tariffed access services, a restriction which we conclude is no longer necessary. *See supra* Part VII.A.2.

[1819] *Triennial Review NPRM*, 16 FCC Rcd at 22814, para. 74.

the D.C. Circuit has denied a petition for review of these safe harbors.[1820]

2. Discussion

a. Scope of Eligibility Criteria Limited to High-Capacity EELs

591. As we explain in detail under our service-specific approach, a carrier seeking access to an unbundled element of the incumbent LEC's network must provide qualifying service to a customer in order to obtain access to that facility pursuant to our section 251 unbundling rules.[1821] With respect to combinations of high-capacity (DS1 and DS3) loops and interoffice transport, we adopt additional eligibility criteria that do not apply to other UNEs. Based on the record before us, we find that it is reasonable to adopt such eligibility criteria for these high-capacity circuits due to the potential for "gaming" by non-qualifying providers that is uniquely possible because of the technical characteristics of these facilities. By gaming of our eligibility criteria, we mean the case of a provider of exclusively non-qualifying service obtaining UNE access in order to obtain favorable rates or to otherwise engage in regulatory arbitrage. This includes the intentional circumvention of the intent of our rules to restrict unbundled network access to bona fide providers of qualifying service, such as a national data network provider carrying minimal qualifying service solely to obtain UNE pricing.

592. We do not, however, impose these additional requirements on access to UNEs other than high-capacity EELs. The record does not indicate concern over misuse of

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[1820] The court denied petitions for review that argued that the safe harbors were arbitrary and capricious. *CompTel*, 309 F.3d at 16-18.

[1821] We also conclude in Part V.B.2.c. that a requesting carrier providing qualifying service can also use that UNE to provide multiple services to a customer.

voice-grade UNE loops, high-capacity loops, or other UNEs.[1822] By contrast, it discloses significant disagreements between incumbent LECs and competitive LECs over application and administration of use restrictions on high-capacity EELs. Accordingly, although a requesting carrier must provide qualifying services to obtain access to loops, lower-capacity EELs and other UNEs and UNE combinations, we need not provide more detailed rules for application of these requirements to other elements at this time, given the lack of controversy and the greater administrative burdens that enforcing such protections places on requesting carriers, incumbent LECs, and the Commission.[1823] Should there become an apparent need in the

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[1822] At least one incumbent LEC indicates that the Commission does not need to apply the same use restrictions to DS0 and other lower-capacity circuits as the Commission should apply to high-capacity circuits. *See* BellSouth Jan. 16, 2003 *Ex Parte* Letter, Attach. at 4 (stating that a simplified use restriction could be implemented so long as the protections for DS1 and higher-capacity circuits are continued and not subject to gaming).

[1823] We conclude that a requesting carrier qualifies for access to loops, transport, subloops, and other stand-alone UNEs, as well as EELs combining lower-capacity loops, so long as that carrier provides a qualifying service to the end-user customer. In contrast to the potential for interexchange carriers to use high-capacity EELs without providing any qualifying services, the record before us does not show such issues exist for transport, loops or other last-mile UNEs. *See, e.g.*, Covad Jan. 21, 2003 *Ex Parte* Letter at 3 (arguing that "a regime of use restrictions on standalone UNE loops, which affects all facilities-based carriers, to avoid speculative concerns about access charge bypass by a few carriers would be a vastly over-inclusive solution in search of a very narrow, speculative problem."). Although BellSouth states that local use restrictions are necessary for stand-alone UNEs, it focuses on the importance of conducting a local service impairment inquiry for all UNEs, and does not identify UNE access by non-local wireline providers as a problem. Letter from Glenn Reynolds, Vice President—Federal Regulatory, BellSouth, to William F. Maher, Chief, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (filed Jan. 21, 2003) (BellSouth Jan. 21, 2003 *Ex Parte* Letter). Accordingly, we find that certification is

future, however, to guard against access to other parts of the network for the provision of non-qualifying services, we would revisit this decision.

593. To ensure that our rules on service eligibility are not gamed in whole or in part, we make clear that the service eligibility criteria must be satisfied (1) to convert a special access circuit to a high-capacity EEL; (2) to obtain a new high-capacity EEL; or (3) to obtain at UNE pricing part of a high-capacity loop-transport combination (commingled EEL). The *Supplemental Order Clarification* targeted the scope of its restrictions to protect a specific definition of special access service from conversion, namely, a service that "employs dedicated, high-capacity facilities that run directly between an end user, usually a large business customer, and the IXC's point of presence."[1824] Although that Order did not rely expressly on the commingling restriction to prevent partial UNE conversions, the D.C. Circuit deduced that a commingling ban would appear to prevent gaming because "commingling will allow the entire base of the loop or 'channel termination' portion of special access circuits to be converted into unbundled loops."[1825] Pointing to this pronouncement from the court, incumbent LECs argue that

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unnecessary to verify that carriers provide qualifying services over these UNEs.

[1824] *Supplemental Order Clarification*, 15 FCC Rcd at 9593, para. 10 n.36 (citations omitted). Our revised definition of dedicated transport, which is limited to transmission facilities within an incumbent LEC's network, squarely removes a key segment of those facilities from the incumbent LEC's unbundling obligation. *See supra* Part VI.C.3.

[1825] *CompTel*, 309 F.3d at 17-18. Incumbent LECs typically sell transmission service over a loop facility out of their special access tariffs as "channel termination." The court went on to explain that "[t]he reason is that there are no use restrictions on unbundled loops, and therefore allowing loops to be freely connected to special access services would allow loops that provide no local services to be unbundled and then merely attached to special access transports." *Id.* at 18.

permitting commingling, as we do in this Order, would risk conversion of the entire channel termination base.[1826]

594. In response to this concern, we apply service eligibility criteria to commingled loop-transport combinations and therefore avoid the possibility of across-the-board loop arbitrage, yet protect access to the UNE portion of a circuit that would otherwise qualify for conversion under the EELs rules we adopt today.[1827] For example, where a state commission finds that transport on a specific route is not available as a UNE pursuant to a Commission-defined trigger, a UNE loop would still be available in combination with a special access transport service on that route *so long as the eligibility criteria are satisfied.* Accordingly, a competitive LEC that provides local voice service would be able to obtain the UNE loop portion of a commingled circuit, but interexchange carriers would be unable to obtain the remaining loop base of special access circuits because of the service eligibility criteria we establish below.

b. Service Eligibility Criteria for High-Capacity EELs

595. A central goal of the service eligibility criteria we establish in this Order is to safeguard the ability of bona fide providers of qualifying service to obtain access to high-capacity EELs while simultaneously addressing the potential for gaming. To that end, we therefore focus on local voice service due to its verifiability and its role as the core competitive offering, either on a stand-alone or bundled basis,

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[1826] *See, e.g.*, Verizon Dec. 17, 2002 *Ex Parte* Letter at 5.

[1827] At least one incumbent LEC endorses the availability of a commingled EEL subject to service eligibility restrictions. Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Feb. 13, 2003) (Qwest Feb. 13, 2003 Commingled EEL *Ex Parte* Letter).

in direct competition to traditional incumbent LEC service.[1828] Importantly, in devising a gating mechanism to obtain high-capacity EELs, we recognize that we must go beyond superficial indicia and require satisfaction of multiple network-specific and circuit-specific criteria to ensure that the requesting carrier demonstrates a commitment to the local voice market.

596. In crafting eligibility requirements for competitive access to high-capacity EELs, we find our experience with the safe harbors set forth in the *Supplemental Order Clarification* to be instructive. On the one hand, several incumbent LECs argue that the safe harbors have provided certainty and accountability, have survived judicial review, and urge the Commission to retain them.[1829] On the other hand, many competitive LECs submit evidence that that the safe harbors and auditing procedures have proved to be unworkable and susceptible to abuse by the incumbent LECs.[1830] While the assignment of a local telephone number and other characteristics of local voice service provide a significant degree of bright-line measurability, we are mindful that overly intrusive and onerous compliance requirements, such as monitoring traffic over individual circuits, serve as a drag on competitive entry. To avoid the difficulties and unwanted effects of measuring usage or certifying to exclusivity in providing qualifying services, we adopt rules based largely on

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[1828] Our identification of local voice service as the touchstone for high-capacity EEL eligibility does not limit our definition of qualifying services or otherwise affect our impairment findings.

[1829] *See, e.g.*, BellSouth Reply at 39-41; SBC Reply at 157-63; Verizon Dec. 17, 2002 *Ex Parte* Letter at 1.

[1830] *See, e.g.*, CompTel Comments at 99 n.206; NuVox *et al.* Reply at 51 (claiming that the safe harbors are "too cumbersome" and "amount to a mad science that challenges network engineers, marketing personnel and provisioners—and leaves far too much opportunity for creative interpretation by the ILECs.").

elements of the proposed architectural solutions advanced by SBC, Qwest, and BellSouth.[1831]

597. We conclude that where a requesting carrier satisfies the following three categories of criteria, it is a bona fide provider of qualifying services and thus is entitled to order high-capacity EELs. First, we find that each requesting carrier must have a state certification of authority to provide local voice service. Second, to demonstrate that it actually provides a local voice service to the customer over every DS1 circuit, we find that the requesting carrier must have at least one local number assigned to each circuit and must provide 911 or E911 capability to each circuit. Third, we find the following additional circuit-specific architectural safeguards to prevent gaming are necessary: each circuit must terminate into a collocation governed by section 251(c)(6) at an incumbent LEC central office within the same LATA as the customer premises;[1832] each circuit must be served by an interconnection trunk in the same LATA as the customer

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[1831] *See* Letter from Julia O. Strow, Vice-President—Regulatory & Industry Relations, Cbeyond *et al.*, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338, Attach. at 3 (filed Feb. 7, 2003) (SBC/NuVox/Cbeyond/SNiP LiNK Feb. 7, 2003 *Ex Parte* Letter); Qwest Feb. 13, 2003 *Ex Parte* Letter; Letter from Herschel L. Abbott, Jr., Vice President—Government Affairs, BellSouth, to Chairman Michael Powell, FCC, CC Docket No. 01-338, Attach. (filed Feb. 13, 2003) (BellSouth Feb. 13, 2003 *Ex Parte* Letter), *in* Letter from Jonathan Banks, General Attorney; BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Feb. 13. 2003). As we discuss later in this Part, several parties, these carriers as well as competitive LECs such as Cbeyond have supplemented their original comments and filed alternative proposals that incorporate network-design solutions intended to allow UNE access for local voice traffic, while seeking to minimize gaming by providers of non-qualifying services. We do not adopt in whole the proposals submitted by any of these carriers.

[1832] 47 U.S.C. § 251(c)(6). We therefore deny WorldCom's request to clarify that a collocation requirement is not necessary for competitive LECs to obtain EELs. MCI WorldCom Feb. 17, 2000 Petition for Clarification at 25.

premises served by the EEL for the meaningful exchange of local traffic, and for every 24 DS1 EELs or the equivalent, the requesting carrier must maintain at least one active DS1 local service interconnection trunk; and each circuit must be served by a Class 5 switch or other switch capable of providing local voice traffic. Requesting carriers must certify to meeting all three criteria (authorization, local number and E911 assignment, and architectural safeguards) to qualify for the high-capacity circuit, subject to the certification and auditing requirements set forth in Part VII.C, below.

598. When applied in their totality, the criteria we adopt here to demonstrate that a requesting carrier has undertaken substantial regulatory and commercial measures to provide local voice service will ensure that the requesting carrier is indeed a provider of qualifying services. In this manner, the criteria afford high-capacity EEL access to an integrated communications provider that sells a bundle of local voice, long-distance voice, and Internet access to small businesses, because such a provider is competing against the incumbent LEC's local voice offerings.[1833] In contrast, a provider of exclusively long-distance voice or data services that seeks to use high-capacity UNE facilities without providing any local services would fall short of one of the tests, if not all. As a further check on potential for abuse, we make clear that these requirements apply to all wholesale as well as retail service offerings over high-capacity EELs.

[1833] For example, Cbeyond reports that well over 95% of its nearly 5000 customers had narrowband access and no T1 service prior to signing up for Cbeyond's integrated package. Letter from Julia Strow, Vice President—Regulatory & Legislative Affairs, Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Dec. 16, 2002) (Cbeyond Dec. 16, 2002 EELs *Ex Parte* Letter); *see also* Letter from Michael H. Pryor, Counsel for NewSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Sept. 26, 2002) (NewSouth Sept. 26, 2002 *Ex Parte* Letter) (stating that over 90% of new customers are upgraded from analog to digital broadband services).

599. We apply the service eligibility requirements on a circuit-by-circuit basis, so each DS1 EEL (or combination of DS1 loop with DS3 transport) must satisfy the service eligibility criteria. Importantly, our adoption of this circuit-specific approach rather than a customer-specific one prevents gaming, so the qualification of one DS1 EEL to a customer does not qualify other DS1 EELs to that customer. Similarly, for arrangements where DS1 loops are multiplexed onto DS3 transport facilities, each DS1 loop that subtends the DS3 transport must qualify in order to obtain the transport at a UNE price.[1834] We also recognize that the harms associated with gaming by long-distance providers increase in direct proportion to the capacity level that a competitor seeks to utilize. Therefore, for a requesting carrier to obtain a DS3 EEL as a UNE, the requesting carrier must satisfy the criteria for service eligibility for the DS1-equivalent circuit capacity of that DS3 EEL.

600. As the Commission explained in adopting thresholds for pricing flexibility, our selection of tests here is not an exact science, but a determination based on agency expertise, our reading of the record before us, and a desire to provide an easily implemented and reasonable bright-line rule to guide the industry.[1835] Specifically, we find that each of these criteria is highly probative of legitimate provision of a qualifying service, and not overly burdensome for a

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[1834] As explained above in Part VI.B.5., we do not require incumbent LECs to ratchet transmission facilities in a blended rate of UNE and special access pricing. Where a requesting carrier serves customers through DS1 facilities that are multiplexed onto a DS3 special access transport service, that carrier may obtain DS1 loops where it satisfies the service eligibility criteria for each loop.

[1835] *See Pricing Flexibility Order*, 14 FCC Rcd at 14276, para. 96 (citing *United States v. FCC*, 707 F.2d, 610, 618 (D.C. Cir. 1983)); *see also* NuVox *et al.* Jan. 10, 2003 *Ex Parte* Letter at 6 ("We can think of no test that will eliminate all possibilities of gaming and any need for enforcement activity.").

requesting carrier to satisfy. We are persuaded on the record before us that while no single requirement can prevent gaming, the criteria we adopt are *collectively* sufficient to restrict the availability of these UNE combinations to legitimate providers of local voice service. The cost of taking the steps necessary to meet these criteria—especially collocation and network re-configuration—outweighs the benefits of lowering that carriers' special access rate to a UNE rate. Accordingly, the burdens and inefficiencies for a provider to meet these criteria for non-qualifying service would deter a carrier of non-qualifying services from re-designing its operations to subvert our rules. If these criteria prove insufficient to prevent the gaming of high-capacity EEL use, we stand ready to take corrective action to remedy any abuse.

(i) Authorization to Provide Voice Service

601. The first prong, certification to provide local voice service, typically involves the review of technical and financial fitness by a state commission. Because some states only require providers of local voice service to be registered as telecommunications providers, certification is not mandatory in those states. As we explain in the discussion of certification and audit procedures below, evidence of registration, tariffing, filing of fees, or other regulatory compliance can demonstrate satisfaction of this criterion.[1836] We emphasize that the entity seeking to obtain the EEL must have direct authorization to do so, and cannot rely on certification granted to an affiliate.

[1836] *See infra* Part VI.B.8.

(ii) Actually Providing Local Voice Service to the Customer Over Every Circuit

602. We find that local number assignment to a DS1 circuit, as well as 911/E911 capabilities, indicate that a requesting provider does, in fact, provide local voice service over that circuit to a customer. To ensure the legitimacy of these assignments, we adopt Qwest's proposal that the origination and termination of local voice traffic should not include a toll charge, and should not require dialing special digits beyond those normally required for a local voice call.[1837] Because some competitive LECs do not assign telephone numbers at the time of ordering,[1838] we find that a requesting carrier may satisfy the numbering and 911/E911 criteria to initiate the ordering process for a new EEL circuit by certifying that it will not begin to provide service until a local number is assigned and 911 or E911 capability is provided.[1839] Further, we also clarify that each DS1-equivalent circuit of a DS3 EEL must have its own local number assignment, so that each DS3 must have at least 28 local voice numbers assigned to it.

(iii) Architectural Safeguards to Prevent Gaming

603. Numerous parties to this proceeding proposed different limitations on access to EELs, many of which featured a variety of architectural solutions. The three

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[1837] Qwest Feb. 13, 2003 *Ex Parte* Letter, Attach. at 1.

[1838] Letter from John J. Heitman, Counsel for ALTS *et al*, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 9 (filed Dec. 16, 2002) (ALTS *et al.* Dec. 16, 2002 *Ex Parte* Letter).

[1839] However, in any event, a requesting carrier must assign the number and implement 911/E911 capability within 30 days after provisioning of the circuit. *See id.* (noting that proof can be supplied in such a timeframe).

elements of the criteria we adopt—collocation, interconnection, and termination at a local switch—build off of these proposals.

604. *Collocation.* We find that termination of a circuit into a section 251(c)(6) collocation arrangement in an incumbent LEC central office is an effective tool to prevent arbitrage, because collocation is a necessary building block for providing local voice services and is traditionally not used by interexchange carriers. More specifically, because traditional interexchange configurations route long-distance traffic from a customer premises over tariffed channel termination and transport facilities directly to an interexchange POP, a section 251(c)(6) collocation requirement ensures that a carrier has set up an architecture that ensures that traffic can leave the incumbent LEC network prior to hitting the POP.[1840] Accordingly, the collocation criterion serves as an easily verifiable test that the circuit terminating at the collocation arrangement carries local voice traffic. As further evidence that a carrier provides qualifying voice service, the

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[1840] A carrier that routes traffic directly from a customer premises to a POP on an inter-city network without providing local service would not have a reason to arrange and pay for collocation and local interconnection trunks. For instance, AT&T reports that 75% of its special access circuits terminate at its interexchange carrier POP. AT&T proposes that, to the extent that the Commission determines to limit the use of UNE combinations (but not individual UNEs), special access combinations terminating at an interexchange carrier POP would not be eligible for UNE conversion. AT&T Jan. 16, 2003 *Ex Parte* Letter at 1, 3-4. We therefore dismiss the assertions by some parties that a collocation requirement is unnecessary to ensure the provision of local service. *See, e.g.*, CompTel Comments at 98-99. We also reject the argument that collocation is too insignificant because "direct connections [to a POP] are not the norm for special access customers." Letter from Dee May, Assistant Vice President, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 2 (filed Jan. 27, 2003).

collocation arrangement must be within the same LATA as the customer premises.[1841]

605. We emphasize that the collocation must be within the incumbent LEC network, and cannot be at an interexchange carrier POP or ISP POP. However, a requesting carrier can satisfy this prong through reverse collocation. For the purposes of this test, we adopt SNiP LiNK's definition of all mutually-agreeable interconnection methodologies.[1842] We also clarify that any non-incumbent LEC collocation arrangement pursuant to section 251(c)(6) meets this test.[1843] Permitting indirect collocation to satisfy this test is especially critical in light of the fact that fewer transmission facilities will be unbundled than previously following the issuance of this Order,[1844] and our conclusion that incumbent LEC

[1841] *See* AT&T Jan. 16, 2003 *Ex Parte* Letter at 7 ("It is a virtual certainty, however, that facilities used to provide non-switched services between two points in a LATA are used to provide significant amounts of 'local' voice or data traffic."). Where there is no single customer premises, such as where the traffic from multiple DS1 wireline end-user loops are aggregated onto a DS3 transport facility, the point of aggregation will serve as the customer premises for the purpose of this requirement.

[1842] Letter from Steven A. Augustino, Counsel for SNiP LiNK, to William Maher, Bureau Chief, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1 (filed Feb. 5, 2003). This definition would include the installation of incumbent LEC equipment at the premises of a competitive LEC or any other entity not affiliated with that incumbent LEC, regardless of whether the incumbent LEC has a cage.

[1843] For example, an EEL connected to a third-party entrance facility originating in that third-party's section 251(c)(6) collocation would satisfy the collocation requirement.

[1844] *See supra* Part VI.C. (finding that carriers are not impaired without access to inter-network transmission facilities (entrance facilities) and implementing triggers for states to make further findings of non-impairment).

prohibitions on the commingling of UNEs with tariffed services are unjust and unreasonable.[1845]

606. Although at least one carrier contends that a collocation requirement would fail to recognize an alternative network arrangement that carries local voice and other services,[1846] we find that collocation is a necessary threshold to prevent providers of non-qualifying services from improperly gaining access, and that the exclusion of qualifying voice service would be minimal.[1847] We acknowledge the difficulties in anticipating every possible configuration or arrangement of a provider of qualifying services, but our approach has the advantage of relatively easy verification by leveraging the current legal commitments necessary to provide qualifying service.

607. *Interconnection.* As an additional indicator of providing local voice service, we find that each EEL circuit must be served by an interconnection trunk in the same

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[1845] *See supra* Part VII.B.

[1846] NewSouth states that in certain instances, it procures a DS1 loop from the incumbent LEC which terminates on the incumbent LEC's main distribution frame at the central office. Under this arrangement, NewSouth purchases a cross-connect to the incumbent LEC's multiplexing equipment, which is connected to a channel facility assignment (CFA) block and then connected to incumbent LEC or third party backhaul to NewSouth's switch. NewSouth Comments at 43. NewSouth characterizes the CFA block it purchases from the incumbent LEC tariff as a "POP."

[1847] Indeed, even NewSouth notes that most of the local loops that it purchases from incumbent LECs terminate at a NewSouth collocation. NewSouth Comments at 42. Other competitive LECs inform us that a collocation requirement would not present a barrier to many competitive LECs using EELs today. *See, e.g.*, ALTS *et al.* Dec. 13, 2002 *Ex Parte* Letter, Attach. at 7. Accordingly, we dismiss the MCI WorldCom Petition for Clarification to the extent that it seeks a rule explicitly stating that incumbent LECs cannot require competitive LECs to collocate in order to obtain EELs. *See* MCI WorldCom Feb. 17, 2000 Petition for Clarification at 24-25.

LATA as the customer premises served by the EEL, and that for every 24 DS1 EELs or the equivalent, the requesting carrier must maintain at least one active DS1 interconnection trunk for the exchange of local voice traffic. As a further safeguard against gaming, where a requesting carrier strips off the calling party number (CPN) on calls exchanged over the interconnection trunk, that trunk shall not be counted towards meeting the trunk/EEL ratio.[1848] The costs and difficulties of network configuration necessary to satisfy the interconnection and collocation requirements minimize the potential for these safeguards to be gamed; only a bona fide provider of qualifying local services would undertake these measures, all of which are a necessary precondition to compete directly against the incumbent LEC's voice service.[1849]

608. The 24-to-1 EEL to interconnection trunk ratio provides a reliable gauge that the competitive LEC exchanges local traffic with the incumbent LEC in a manner that indicates that it is a bona fide provider of local voice service.[1850] One incumbent LEC claims that even at full local utilization this ratio allows only for a maximum of four percent local usage and therefore cannot be considered

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[1848] *See* SBC/NuVox/Cbeyond/SNiP LiNK EELs *Ex Parte* Letter, Attach. at 3.

[1849] We establish these requirements for purposes of unbundling high-capacity EELs only, and not for the purposes of the ongoing reciprocal compensation proceeding or any other docket.

[1850] The proponents of a proposal that incorporates the 24-to-1 ratio as a safeguard for smaller competitive LECs explain that "the Commission could reasonably conclude that, in its expert judgment, the purchase and use of proportional and bona fide local interconnection capacity for every DS1 EEL (1) demonstrates a carrier's commitment to facilities-based entry into the *local exchange* market in the relevant LATA and (2) indicates a reasonable likelihood that a significant amount of local traffic is carried on given EEL facilities." Cbeyond *et al.* Feb. 4, 2003 *Ex Parte* Letter at 4.

"significant," on the apparent theory that one channel on an interconnection trunk is necessary to serve one voice channel of the 24 channels in a DS1 EEL.[1851] However, proponents of the ratio explain that it has its roots in the general engineering principle that one DS0 interconnection trunk can serve every five local access lines,[1852] so that one active DS1 local service interconnection trunk can serve 24 DS1 EELs that have 5 local voice channels on each EEL. We find that this ratio therefore provides a reasonable proxy for the capacity of interconnection that a bona fide provider of local voice service competing against the incumbent LEC would require.[1853] Moreover, as we explain above in this Part, we base our EEL eligibility criteria on whether a requesting carrier is a bona fide provider of local voice service, and do not retain the temporary threshold of "significant amount of

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[1851] Letter from Susanne Guyer, Senior Vice President, Federal Regulatory Affairs and Ed Shakin, Vice President and Associate General Counsel, Verizon, to the Honorable Michael Powell, Chairman, FCC, at 4 (dated Feb. 12, 2003) (Verizon Feb. 12, 2003 *Ex Parte* Letter), *in* Letter from Dee May, Assistant Vice President, Verizon to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Feb. 12, 2003).

[1852] Letter from John J. Heitmann, Counsel for SNiP LiNK and NuVox, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4 (filed Feb. 14, 2003).

[1853] Verizon concedes that establishing a "reasonable" ratio of trunks to EELs, such as 4-to-1, would help shore up this test. Letter from W. Scott Randolph, Director—Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Feb. 14, 2003) (Verizon Feb. 14, 2003 *Ex Parte* Letter). The nature of interconnection trunk concentration, in which five EELs can be served by one interconnection trunk, supports the test we adopt. Furthermore, as the competitive LEC proponents of the SBC/CLEC EELs proposal point out, competitive LEC customers do place calls to each other that never reach the incumbent LEC network, so that the interconnection trunks between a competitive LEC and incumbent LEC do not capture all the local voice traffic that a competitive LEC originates and terminates. Cbeyond *et al.* Feb. 13, 2003 *Ex Parte* Letter at 4.

local exchange service" established in the *Supplemental Order*.

609. Verizon asserts that trunks inbound to a competitive LEC frequently carry Internet-bound traffic and are not obtained by the competitive LEC, and that only competitive LEC-outbound trunks should count toward the ratio.[1854] Due to the variety of interconnection arrangements that a bona fide local voice service provider may choose to implement, we do not exclude all one-way inbound trunks as they can be part of a legitimate interconnection arrangement.[1855] However, where a competitive LEC does not arrange for a meaningful exchange of traffic—which must include hand-offs of local voice calls that flow in both directions—those arrangements cannot be attributed towards satisfaction of this criterion. For similar reasons, we also reject Qwest's proposal that a competitive LEC must associate the individual EEL collocation termination point with a local interconnection trunk in the same wire center.[1856] Because a legitimate provider of local voice service may configure its network in various ways such that each EEL is not terminated in the same wire center as the interconnection trunk,[1857] adopting such a proposal could impose inefficient traffic engineering requirements. Moreover, our requirement that each EEL must be in the same LATA as the interconnection trunk associated

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[1854] Verizon Feb. 12, 2003 *Ex Parte* Letter at 4.

[1855] For example, a competitive LEC may choose to purchase a two-way trunk, or may purchase a one-way trunk and arrange for the incumbent LEC to purchase a one-way trunk in the opposite direction.

[1856] Letter from Cronan O'Connell, Vice President—Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338, 96-98, 98-147 at 1 (filed Feb. 13, 2003) (Qwest Feb. 13, 2003 *Ex Parte* Letter).

[1857] For example, a competitive LEC could build a fiber ring that connects two or more incumbent LEC wire centers where EELs terminate, and hub the traffic from those wire centers to an interconnection trunk that connects to only one wire center.

with that EEL adequately ensures that interexchange carriers will not game the criteria by purchasing sham trunks that are remote and unrelated to the EEL circuits that carry local voice traffic.

610. *Local Switching.* We find that each EEL circuit must be served by a Class 5 switch or other switch capable of providing local voice traffic. To ensure that the traffic carried over each EEL is not exclusively non-local, a requesting carrier must certify that the switching equipment is either registered in the LERG as a Class 5 or that it can switch local voice traffic. In adopting this safeguard, we also reject the proposal of certain competitive LECs that we should adopt an eligibility restriction whereby a requesting carrier cannot obtain UNEs on circuits that "are served by switching equipment used exclusively to provide interexchange voice services (registered in the LERG as a Class 4-only switch)."[1858] We are not persuaded that a "switch class" approach based solely on LERG registration is sufficiently linked to our service qualification goals. As the *Supplemental Order Clarification* explained in rejecting a proposal to presume that circuits terminating in a Class 5 switch are exclusively local, switch type does not provide a basis for assuming the traffic type of every terminating circuit.[1859] Our record in this proceeding demonstrates that the proposal to ban termination at a Class 4 switch would be over-exclusive, as at least one party informs us that, in the same manner as other carriers, it can and does provide local service over Class 4 switches and "soft" (or packet) switches.[1860] Moreover, grounding our requirements in the technology of the traditional Class 5 circuit-switched network would create a

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[1858] ALTS *et al.* Dec. 13, 2002 *Ex Parte* Letter, Attach. at 6; ALTS Nov. 14, 2002 *Ex Parte* Letter at 4-5.

[1859] *Supplemental Order Clarification*, 15 FCC Rcd at 9601, para. 25.

[1860] *See* AT&T Apr. 30, 2001 Fea/Taggart Reply Decl. at para. 3 n.1; AT&T Feb. 12, 2003 *Ex Parte* Letter at 12.

disincentive to the deployment of micro-switching and the integration of data and voice traffic.[1861] In light of the evolving uses of equipment and innovations, we are not inclined to categorically rule out any carrier on the basis of the class of switches it deploys.[1862]

611. The record also indicates that, for many carriers the costs of gaming a local switching requirement outweigh the benefit of a reduction in special access payments. For example, WorldCom explains that none of its Class 5 switches provide dedicated access services and that its long distance switches do not provide local service, and that it cannot reconfigure its Class 5 switches to provide dedicated access-based services.[1863]

[1861] *Collocation Remand Order*, 16 FCC Rcd at 15453, para. 33 (concluding that "multi-functional equipment is designed to enable telecommunications carriers, both incumbent LECs and their competitors, to offer their customers an ever-increasing array of telecommunications services, including advanced services, with ever-increasing efficiency"); *see also, e.g.*, Taqua Comments at 2-3 (discussing its development of alternatives to legacy telecommunications networks and equipment in systems that combine traditional end office switching with integrated softswitch functionality and the ability to provide next-generation subscriber services in a single chassis).

[1862] The local switching safeguard we adopt renders irrelevant WorldCom's pending request for a presumption that circuits that terminate on a Class 5 switch are local circuits. *See* WorldCom, Inc. Petition for Waiver, CC Docket No. 96-98 at 1, 2, 15 (filed Sept. 12, 2000) (WorldCom Waiver Petition). In addition, we note that favoring a switch-neutral approach could benefit smaller businesses by giving them flexibility to purchase innovative and more efficient switches.

[1863] WorldCom Waiver Petition at 9 ("WorldCom cannot reconfigure its Class 5 switches to carry long-distance traffic without restructuring large portions of its network and related systems and process infrastructure, including its diverse customer and carrier billing, ordering, and provisioning systems.").

(iv) Other Service Eligibility Proposals

612. We conclude that none of the other eligibility tests proposed on the record before us is preferable to the indicia of qualifying services that we adopt here. For example, SBC, BellSouth, and Verizon support a continuation of or limited modification to the current safe harbors,[1864] and Qwest proposes a local use restriction requiring a certification that the facility carries at least 51 percent local voice traffic.[1865] As an initial matter, we note that the Commission established the usage restrictions in the safe harbors as a temporary restriction on conversions while the Commission compiled an adequate record to address the legal and policy issues raised in the *Fourth FNPRM*.[1866] They were meant to be a temporary proxy rather than a permanent restriction, and now that we have had practical experience with traffic tests and adequate time to evaluate them and the underlying record in this proceeding, for several reasons we decline to perpetuate current local voice thresholds mandated by safe harbors (2) and (3), or to adopt any proposal based on enumerated percentages of traffic.

613. We agree with Cbeyond that measuring minutes of use is antithetical to the Act's goals of encouraging the provision new technologies and advanced services, because those usage tests could conceivably work only for channelized DS1 providers and would improperly exclude those carriers

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[1864] *See, e.g.*, BellSouth Jan. 16, 2003 *Ex Parte* Letter at 4; Verizon Feb. 14, 2003 *Ex Parte* Letter at 2 (stating that "[a]ny enhancement to the existing safe harbors must contain a local traffic requirement.").

[1865] Along with a threshold test that a requesting carrier satisfies the 51% local traffic threshold or is the exclusive local provider, Qwest proposes several other architectural safeguards and a marketing requirement. Qwest Feb. 13, 2003 *Ex Parte* Letter, Attach. at 1. BellSouth's proposed requirements include a 50% threshold for local voice traffic. BellSouth Jan. 21, 2003 *Ex Parte* Letter at 6.

[1866] *Supplemental Order Clarification*, 15 FCC Rcd at 9592, para. 8.

deploying packetized networks.[1867] Classifying and measuring voice traffic separately from data traffic is incompatible with the integration of voice and data in new packetized networks, and we find that basing our new rules on the distinction between voice and data would inhibit this new technology. Moreover, mandating thresholds based upon percentages of qualifying traffic would penalize technological advancements in voice compression, and have the perverse effect of disqualifying the most efficient and innovative deployment of voice technology.[1868]

614. In addition, the record demonstrates that requiring competitors to ascertain and certify to traffic percentages is burdensome and difficult to administer. This has been the case even in the context of converting an existing customer facility from special access to UNEs, and therefore would be even more difficult in the context of initiating service over newly-provisioned circuits.[1869] More specifically, because the carrier providing service does not control customer calling patterns, and local usage can fluctuate day to day or month to month, requiring competitors to certify to future customer use as a precondition to obtaining a UNE puts them in an

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[1867] 47 U.S.C. § 157; Cbeyond Dec. 16, 2002 *Ex Parte* Letter at 2-3. Cbeyond delivers a bundle of local, long-distance, and Internet access services by utilizing dynamic bandwidth allocation of a DS1 through packetized IP technology.

[1868] *See, e.g.*, Cbeyond Dec. 16, 2002 *Ex Parte* Letter at 3.

[1869] For example, AT&T explains that because requesting carriers typically order backhaul infrastructure facilities that are not immediately placed in service, "such facilities are not identified with any specific customers and carry no traffic" and thus "it is not even possible to tell which of them would be used to provide any particular type of traffic." Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, and 98-147 at 2 (filed Jan. 16, 2003).

untenable position.[1870] Although some carriers have been able to measure and categorize their traffic sufficiently to certify to these safe harbors,[1871] many other competitive LECs report that the safe harbor regime is burdensome and unworkable because they lack sufficient information to make the necessary certification at the time the EEL is requested, and have no feasible way to obtain the necessary information going forward to ensure continued compliance.[1872] Further, many competitive LECs allege that incumbent LECs have misconstrued the auditing process and improperly denied competitors' self-certifications.[1873] Although the D.C. Circuit upheld the safe harbors as interim measures, due to the measuring difficulties and potential for burdensome audits

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[1870] *See, e.g.*, Letter from Ross A. Buntrock, Counsel for e.spire, to Magalie R. Salas, Secretary, FCC, CC Docket No. 96-98, Attach. at 9 (filed Apr. 19, 2000) ("e.spire can commit to channels carrying local traffic, but e.spire cannot predict the extent to which a given customer's T-1s will carry local traffic"); WorldCom Waiver Petition at 14 ("it is impossible to predict how many switched access long-distance calls a particular customer might make or receive in the aggregate on all of the local channels provided by WorldCom.").

[1871] *CompTel*, 309 F.3d at 17.

[1872] *See, e.g.*, CompTel Comments at 99 n.206; AT&T Comments at 164 (contending that the circuit-by-circuit certification process is "inherently unworkable because CLECs' systems—including AT&T's—are not built to provide the kind of data necessary to support such record keeping requirements"); AT&T Jan. 16, 2003 *Ex Parte* Letter at 2 ("Thus, it is not even possible to tell which [facilities] would be used to provide any particular type of traffic. Accordingly, any attempt to isolate 'UNEs' to 'local' traffic and 'services (or elements that are not UNEs)' to 'non-local' traffic would be impossible."); Cbeyond *et al.* Feb. 13, 2003 *Ex Parte* Letter at 3 (noting that the measurement requirements contained in the usage-based qualification criteria of safe harbors (2) and (3) require additional circuit-specific engineering and monitoring).

[1873] *See, e.g.*, ALTS *et al.* Comments at 100; NuVox Petition at 1.

inherent to traffic thresholds, we conclude that these usage restrictions are inferior to those we adopt here.[1874]

615. To recognize the increasing market demand for diverse network infrastructure and for other reasons, we also do not perpetuate safe harbor (1), which allowed a carrier to convert special access circuits to EELs upon certification that it is the "exclusive" provider of local exchange service. As competitive carriers inform us, many customers seek multiple local carriers to ensure connectivity in the event of temporary constraints or problems[1875] as well as to apply competitive pressure,[1876] and we are reluctant to adopt rules that encourage carriers to obtain commitments contrary to the market trend towards diversity, or that add additional layers of regulation to the customer-provider relationship.[1877] In addition, because a carrier may certify to exclusivity in good-faith reliance upon a customer's misrepresentation that it has only one local service provider, or that subscribes to a second local service provider at a later time, this safe harbor presents significant difficulties in administration.[1878]

[1874] Because we are not extending the safe harbors going forward, we hereby dismiss as moot the petitions for waiver of particular safe harbors filed by ITC^DeltaCom and WorldCom. *See* ITC^DeltaCom Waiver Petition; WorldCom Waiver Petition.

[1875] *See, e.g.*, AT&T Feb. 12, 2003 *Ex Parte* Letter at 6 (noting that mid-sized and large business end users "are sophisticated customers that demand flexibility" to adjust the number of providers they use and the amount of service).

[1876] Cbeyond Dec. 16, 2002 *Ex Parte* Letter at 3.

[1877] *See* AT&T Jan. 16, 2003 *Ex Parte* Letter at 6 & n.11 (stating that "it is nearly impossible to get customers to certify what their usage will be on particular facilities," and that "many customers may simply consider it not to be any of the CLEC's business whether they are using other providers.").

[1878] "[E]ven if a CLEC could obtain a representation from a customer that it is the customer's only supplier of local services, there is no reasonable way for a CLEC to determine whether it continues to be the

616. We also reject the joint proposal from SBC, NuVox, Cbeyond, and SNiP LiNK to subject a carrier with total telecommunications revenues above two percent of total industry local and toll revenues to the *Supplemental Order Clarification* safe harbors, but apply a more limited set of non-usage safeguards to a "smaller CLEC" with revenues below that threshold.[1879] We find that establishing two tiers of eligibility restrictions based on revenue is not tailored to our goals in imposing restrictions of encouraging local competition but minimizing the arbitrage opportunities for providers of non-qualifying services. The proponents of the tiered approach argue that the fixed costs of deploying systems to track and report the mix of traffic over given facilities "have a more significant economic impact on a smaller carrier with smaller overall telecommunications revenues than on larger carriers," and therefore are more likely to affect the entry decisions of smaller carriers.[1880] However, the SBC/NuVox/Cbeyond proposal fails to capture the decision-making process of a competitive LEC entering a market and the potential for gaming. Any cost/benefit analysis should not involve the ability to spread the costs over other revenues, but should be limited to identifying the costs

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customer's sole supplier over time, other than by continually asking the customer, which is at best difficult and awkward from a marketing perspective, and at worst anticompetitive." AT&T Comments on WorldCom Petition for Waiver, CC Docket No. 96-98 (filed Oct. 2, 2000) at 6-7.

[1879] More specifically, a carrier qualifies as a "smaller CLEC" if "its total telecommunications revenues do not exceed two percent of total telecommunications industry local and toll service revenues, and its gross annual toll service revenues do not exceed two percent of all toll service revenues," based upon the industry revenue figures published most recently by the Wireline Competition Bureau. SBC/NuVox/Cbeyond/ SNiP Link Feb. 7, 2003 EELs *Ex Parte* Letter at 3. The total industry local and toll service telecommunications revenues for 2000 were $292.8 billion. *Trends in Telephone Service May 2002 Report* at Table 16.1.

[1880] SBC/NuVox/Cbeyond/SNiP LiNK EELs *Ex Parte* Letter at 3.

of being able to obtain a specific set of EEL circuits against the benefits of obtaining those circuits.[1881] Similarly, the proponents of this test fail to demonstrate that the costs are "fixed," as they would appear to vary with the number of circuits and customers.[1882] Moreover, the record before us does not support the implementation of any tiered system based upon administrative costs and revenue size because there is no evidence of their sizes, much less of their relationship to each other. As Verizon notes, the proponents of this proposal do not quantify or substantiate the costs and burdens of compliance, and would screen out only the very largest carriers—a carrier with over four billion dollars in revenues would qualify as a "smaller CLEC."[1883]

617. We decline to adopt the requirement proposed by Qwest and BellSouth that the service offered to an end user

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[1881] For example, there is no reason that a large interexchange carrier or out-of-region incumbent LEC seeking to obtain a small amount of EEL circuits over the course of a year should be held to a more burdensome standard than a mid-sized competitive LEC seeking to obtain a large amount of EEL circuits. In this instance, the mid-sized carrier has a greater incentive for non-qualifying service arbitrage and a greater benefit from lower UNE rates, yet is held to a lesser compliance standard.

[1882] "The only way to determine whether any *particular* circuit qualifies for conversion to an EEL is to undertake very expensive measurement processes with respect to that circuit. . . . [M]easuring the traffic mix on 1,000 circuits is not materially less expensive *per circuit* than measuring the traffic mix on 100 circuits." AT&T Feb. 12, 2003 *Ex Parte* Letter at 9 (emphasis in original).

[1883] Verizon Feb. 12, 2003 *Ex Parte* Letter at 3; *see also* BellSouth Feb. 13, 2003 *Ex Parte* Letter at 3 (seeking further study of the feasibility and costs of traffic measurement as well as the revenue thresholds). The explanation by the competitive LEC proponents of the proposal that the two percent revenue figure is based on the section 251(f)(2) suspension of certain unbundling obligations is unavailing, as the two percent figure in that section of the Act is based on lines, not revenues; is designed for incumbent LECs, not competitive LECs; and addresses a wholly different set of administrative burdens. Cbeyond *et al.* Feb. 12, 2003 *Ex Parte* Letter at 5.

over a high-capacity EEL must be marketed and sold as a local exchange service, or a bundle of services.[1884] State commissions currently regulate the tariffing and other terms of service of common carrier local voice services, and the practical difficulties of policing carriers' marketing and advertising efforts do not support the initiation of additional regulation. Furthermore, we also find Qwest's proposal to require a requesting carrier to have percent of local use arrangements (PLUs) on file[1885] to be overexclusive, because not all competitive LECs report PLUs on local interconnection trunks, and because it has the same usage measurement problems as those described above.[1886]

618. We conclude that the three criteria we adopt here together comprise the most probative and administratively reasonable indicia of providing qualifying traffic. We reject proposals to permit access to UNEs based upon partial satisfaction of a broader number of indicators.[1887] For

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[1884] *See, e.g.*, Qwest Feb. 13, 2003 *Ex Parte* Letter, Attach. at 1; BellSouth Jan. 31, 2003 *Ex Parte* Letter, Attach. 2 at 1.

[1885] Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 Attach. at 19 (filed Nov. 14, 2002) (Qwest Nov. 14, 2002 *Ex Parte* Letter).

[1886] ALTS *et al.* Dec. 16, 2002 *Ex Parte* Letter, Attach. at 10 (explaining that some competitive LECs use meet-point rather than trunking arrangements).

[1887] We also reject the other proposed iterations of service eligibility restrictions on the record, because they are more attenuated from implementing the goals of our service considerations. For example, NuVox submits a "business plan" test, permitting access to high-capacity UNEs based upon a general determination of whether a competitive LEC offers service in direct competition with incumbent LECs, without regard as to whether specific facilities are used as part of that offering. Letter from John J. Heitmann, NuVox, to Christopher Libertelli, Legal Advisor to Chairman Powell, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2-3 (filed Jan. 15, 2003) (NuVox Jan. 15, 2003 *Ex Parte* Letter). We

example, several carriers propose allowing requesting carriers to obtain UNEs by meeting a subset of a broader menu of compliance indicia, including local telephone number assignment; "offer[ing] local voice, local data and/or Internet access in the LATA;" and the presence of a switch that is not exclusively used to provide long distance service that serves the circuit.[1888] Some of these additional indicia, such as LERG registration of switch class type, are problematic for the reasons we describe above, or are inconsistent with the qualifying service approach that we adopt. Moreover, because some criteria are more essential to providing qualifying service than others, we are not persuaded that an approach permitting the partial satisfaction of a list of factors is superior to our approach of a focused list of mandatory requirements. If a carrier had a local number assignment and collocations but, for some reason, no longer had a valid

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expressly reject above such a business strategy-specific notion of impairment. *See supra* Part V.B.1.

[1888] For instance, a group of carriers propose that circuits be made available as UNEs upon certification by a requesting carrier that at least two of the following five compliance criteria are met:

> the circuit is connected to a collocation in an ILEC end office; or
>
> the CLEC has active local interconnection trunks with the ILEC in the LATA; or
>
> the CLEC offers local voice, local data and/or Internet access in the LATA; or
>
> the CLEC assigns a local telephone number associated with the circuit; or
>
> the circuit is not served by a switch that is used exclusively to provide long distance service.

Letter from John J. Heitmann, Counsel for Nuvox, SNiP LiNK, Xspedius and KMC Telecom, to Michelle Carey, Chief, Competition Policy Division, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 5-6 (filed Jan. 17, 2003). Other carriers have suggested modified versions of this approach. *See, e.g.*, NuVox Jan. 15, 2003 *Ex Parte* Letter at 3-4 (proposing a "3 of 5" standard or a "2 plus 1 of 3" standard, based on additional compliance with one of two or more alternative criteria); XO Feb. 5, 2003 *Ex Parte* Letter, Attach. at 4 (proposing that four out of five criteria must be met).

certification to provide service or local interconnection, that carrier should not be eligible for a high-capacity EEL facility. We find that requiring all requesting carriers seeking high-capacity EELs to satisfy the same three categories of criteria provides predictability and certainty, and will ensure that the audit process is more easily administered and, therefore, less costly to both incumbent LECs and competitors.

619. Finally, we do not endorse the requests advanced by some incumbent LECs for additional dialogue on architectural solutions with the goal of a collaborative resolution.[1889] In the many months since the issuance of the temporary restrictions of the *Supplemental Order Clarification*, as well as the issuance of the *January 24, 2001 Public Notice*, and the *Triennial Review NPRM*, the Commission has amassed through numerous pleadings, *ex parte* meetings and an industry roundtable a considerable record of the pragmatic difficulties of the current safe harbors and the risk of conversions.[1890] Now that we have answered

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[1889] BellSouth Feb. 13, 2003 *Ex Parte* Letter at 1-3 (contending also that "further industry dialogue in a less rushed atmosphere is likely to result in an improved and more focused proposal"); Verizon Feb. 12, 2003 *Ex Parte* Letter at 4 (asking for more time for various parties to analyze proposals and provide input to the Commission to avoid unintended and unanticipated consequences); Letter from William P. Barr, Verizon, to Michael K. Powell, Chairman, FCC, *in* Letter from Ann D. Berkowitz, Project Manager—Federal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Feb. 6, 2003) (Verizon Feb. 6, 2003 Barr *Ex Parte* Letter) (asking for the Commission to obtain comment on the various proposals).

[1890] Several parties note that the issues associated with access to EELs are not new and do not warrant further delay. *See, e.g.*, Letter from John J. Heitmann, Counsel for NuVox and SNiP LiNK, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Feb. 12, 2003) (noting that EEL access issues have been extensively vetted in the *Triennial Review* proceeding and associated proceedings); AT&T Feb. 12, 2003 *Ex Parte* Letter at 4 (arguing that "the Bells have now had *years* to submit evidence supporting use restrictions generally and the interim rules in particular") (emphasis in original).

the questions regarding service-by-service analysis that led to the interim safe harbors, we conclude that we have a sufficient record to resolve eligibility issues by issuing findings of the appropriate criteria, and that further delay would retard the development of local competition.

C. Certification and Auditing

1. Background

620. In order to allow carriers meeting the safe harbors set forth in the *Supplemental Order Clarification* to convert tariffed loop-transport combinations to UNE rates, the Commission established a framework of self-certification and auditing.[1891] The Commission declined to identify precise terms of certification, but recognized that a letter sent to the incumbent LEC is a practical method.[1892] Further, upon receiving a request from a requesting carrier certifying to meeting one of the safe harbors, the incumbent LEC should immediately process the conversion.[1893]

621. The Commission also found that, to confirm reasonable compliance with the local usage requirements in that Order, incumbent LECs may conduct limited audits only to the extent reasonably necessary to determine a requesting carrier's compliance with the local usage options identified by the carrier.[1894] The Commission emphasized "that incumbent LECs may not require a requesting carrier to submit to an audit prior to provisioning combinations of unbundled loop and transport network elements."[1895] Moreover, the Commission concluded that "audits will not be routine

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[1891] *Supplemental Order Clarification*, 15 FCC Rcd at 9602-04, paras. 28-33.

[1892] *Id.* at 9602-03, para. 29.

[1893] *Id.* at 9603-04, para. 31.

[1894] *Id.* at 9602-03, para. 29

[1895] *Id.* at 9603-04, para. 31.

practice, but will only be undertaken when the incumbent LEC has a concern that a requesting carrier has not met the criteria for providing a significant amount of local exchange service."[1896] Relying upon broad agreement between incumbent and competitive LECs in that proceeding on audit procedures, and to reduce the burden on requesting carriers, the Commission set forth additional principles providing competitors with notice, limiting the frequency of audits, and establishing practical recordkeeping requirements.[1897]

[1896] *Id.* at 9603-04 n.86.

[1897] The Commission found "that incumbent LECs must provide at least 30 days written notice to a carrier that has purchased [an EEL] that it will conduct an audit;" "may not conduct more than one audit of the carrier in any calendar year unless an audit finds non-compliance;" and that when "an incumbent LEC provides notice of an audit to the affected carrier, it should send a copy of the notice to the Commission" so the Commission can monitor the implementation. These carriers also agreed that incumbent LECs requesting an audit should hire and pay for an independent auditor to perform the audit, and that the competitive LEC should reimburse the incumbent LEC if the audit uncovers non-compliance with the local usage options. The Commission also stated its expectation "that requesting carriers will maintain appropriate records . . . to support their local usage certification," but emphasized "that an audit should not impose an undue financial burden on smaller requesting carriers that may not keep extensive records," and found that, "in the event of an audit, the incumbent LEC should verify compliance for these carriers using the records that the carriers keep in the normal course of business." *Supplemental Order Clarification* at 9603-04, paras. 31-32.

On May 17, 2002, NuVox filed a Petition for Declaratory Ruling in Docket No. 96-98 identifying certain auditing issues, and seeking further declaration from the Commission regarding auditing procedures. *Pleading Cycle Established for Comments on NuVox, Inc. Petition for Declaratory Ruling*, Public Notice, CC Docket No. 96-98, DA 02-1302, Public Notice (rel. June 3, 2002). Among other relief, NuVox requests that the Commission declare that an independent LEC must provide requesting carrier proof of the independence of the third party auditor, and that competitive LECs must reimburse the incumbent LEC for only the *pro rata* share of the circuits found to be non-compliant. NuVox and other carriers make reference to those pleadings in their comments to the

2. Discussion

622. We adopt certification and auditing procedures comparable to those established in the *Supplemental Order Clarification* for our service eligibility criteria, and tailor the substantive requirements to our eligibility restrictions, as set forth below. Although the bases and criteria for the service tests we impose in this Order differ from those of the *Supplemental Order Clarification*, we conclude that they share the basic principles of entitling requesting carriers unimpeded UNE access based upon self-certification, subject to later verification based upon cause, are equally applicable. Significantly, because the eligibility criteria we adopt in this Order are based upon indicators such as collocation more easily verified than traffic measurement or categorization of the safe harbors, we anticipate that these procedures can effectively limit UNE access to bona fide providers of qualifying service without imposing undue burdens upon them.

a. Certification

623. We conclude that requesting carrier self-certification to satisfying the qualifying service eligibility criteria for high-capacity EELs is the appropriate mechanism to obtain promptly the requested circuit, and consistent with our findings of impairment.[1898] A critical component of nondiscriminatory access is preventing the imposition of any undue gating mechanisms that could delay the initiation of the ordering or conversion process. Unlike the situation before the Commission when it issued the *Supplemental Order Clarification*, which only addressed EEL conversions, new

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instant proceeding, and we address the relevant portions of the responsive pleadings in this Order.

[1898] No certification is necessary for requesting carriers to obtain access to loops, transport, subloops, and other stand-alone UNEs, as well as EELs combining lower-capacity loops, although carriers must provide a qualifying service over those UNEs to obtain them. *See supra* Part VII.B.

orders for circuits are subject to the eligibility criteria. Due to the logistical issues inherent to provisioning new circuits, the ability of requesting carriers to begin ordering without delay is essential.[1899]

624. Before accessing (1) a converted high-capacity EEL, (2) a new high-capacity EEL, or (3) part of a high-capacity commingled EEL as a UNE, a requesting carrier must certify to the service criteria set forth in Part VII.B.2.b in order to demonstrate that it is a bona fide provider of qualifying service. We do not specify the form for such a self-certification, but we readopt the Commission's finding in the *Supplemental Order Clarification* that a letter sent to the incumbent LEC by a requesting carrier is a practical method.[1900]

b. Auditing

625. As a threshold matter, we set forth basic principles regarding carriers' rights to undertake and defend against audits. However, we recognize that the details surrounding the implementation of these audits may be specific to related provisions of interconnection agreements or to the facts of a particular audit, and that the states are in a better position to address that implementation.[1901] For example, to the extent

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[1899] If a requesting carrier certifies that it will provide qualifying services over high-capacity EELs in accordance with the Commission's rules, an incumbent LEC that wishes to challenge the certification may not engage in self-help by withholding the facility in question. The success of facilities-based competition depends on the ability of competitors to obtain the unbundled facilities for which they are eligible in a timely fashion. Thus, an incumbent LEC that questions the competitor's certification may do so by initiating the audit procedures set forth below.

[1900] *Supplemental Order Clarification*, 15 FCC Rcd at 9602-03, para. 29.

[1901] *See, e.g.*, BellSouth Opposition, CC Docket No. 96-98 at 2 (filed June 3, 2002) (reporting that BellSouth filed a complaint with the Georgia

that the parties dispute the definition of an "independent" auditor and whether a given party satisfies the test for independence, the more appropriate forum for this determination is a state commission.[1902]

626. We conclude that incumbent LECs should have a limited right to audit compliance with the qualifying service eligibility criteria. In particular, we conclude that incumbent LECs may obtain and pay for an independent auditor to audit, on an annual basis, compliance with the qualifying service eligibility criteria.[1903] We conclude that an annual audit right strikes the appropriate balance between the incumbent LECs' need for usage information and risk of illegitimate audits that impose costs on qualifying carriers. The independent auditor must perform its evaluation in accordance with the standards established by the American Institute for Certified Public Accountants (AICPA), which will require the auditor to perform an "examination engagement" and issue an opinion regarding the requesting carrier's compliance with the qualifying service eligibility criteria.[1904] We note that, because the concept of materiality governs this type of audit, the independent auditor's report will conclude whether the

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Commission on May 13, 2002 requesting the Georgia Commission to direct NuVox to allow the audit to commence immediately).

[1902] *See* NuVox Petition at 6-7.

[1903] *See* NuVox Petition at 2 (proposing that incumbent LECs obtain and pay for the services of an independent third party auditor).

[1904] Letter from John J. Heitmann, Counsel for NuVox, to Michelle Carey, Chief, Competition Policy Division, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 6 (filed Jan. 10, 2003) (NuVox Jan. 10, 2003 EELs and Auditing *Ex Parte* Letter) (proposing that Commission should require AICPA-compliance auditor to perform such audits). *See* American Inst. of Certified Pub. Accountants, STATEMENTS ON STANDARDS FOR ATTESTATION ENGAGEMENTS NO. 10, at § 6.30 (Jan. 2001) (AICPA ATTESTATION STANDARDS). The AICPA also has standards and other requirements related to standards for determining the independence of an auditor shall govern the audit of requesting carrier compliance.

competitive LEC complied in all material respects with the applicable service eligibility criteria.[1905] Consistent with standard auditing practices, such audits require compliance testing designed by the independent auditor, which typically include an examination of a sample selected in accordance with the independent auditor's judgment.

627. To the extent the independent auditor's report concludes that the competitive LEC failed to comply with the service eligibility criteria, that carrier must true-up any difference in payments, convert all noncompliant circuits to the appropriate service, and make the correct payments on a going-forward basis. In addition, we retain the requirement adopted in the *Supplemental Order Clarification* concerning payment of the audit costs in the event the independent auditor concludes the competitive LEC failed to comply with the service eligibility criteria.[1906] Thus, to the extent the independent auditor's report concludes that the competitive LEC failed to comply in all material respects with the service eligibility criteria, the competitive LEC must reimburse the incumbent LEC for the cost of the independent auditor. We expect that this requirement should provide an incentive for competitive LECs to request EELs only to the extent permitted by the rules we adopt herein.

628. Similarly, to the extent the independent auditor's report concludes that the requesting carrier complied in all material respects with the eligibility criteria, the incumbent LEC must reimburse the audited carrier for its costs

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[1905] AICPA ATTESTATION STANDARDS at §§ 6.36 (explaining concept of materiality), 6.64 (explaining reporting issues related to material noncompliance).

[1906] *Supplemental Order Clarification*, 15 FCC Rcd at 9603-04, para. 31 (requiring competitive LECs to "reimburse the incumbent if the audit uncovers non-compliance with the local usage options.").

associated with the audit.[1907] We expect that this reimbursement requirement will eliminate the potential for abusive or unfounded audits, so that incumbent LEC will only rely on the audit mechanism in appropriate circumstances. We further expect that these reimbursement requirements will ensure the audit process (and importantly, the resolution of any issues arising out of any audits) occurs in a self-executing manner with minimal regulatory involvement.

629. Although we do not establish detailed recordkeeping requirements in this Order, we do expect that requesting carriers will maintain the appropriate documentation to support their certifications. For instance, to demonstrate satisfaction of the first category for high-capacity EELs (authorization to provide voice service), we anticipate that state certification would be the most prevalent form of documentation, but that evidence of registration, tariffing, filing of fees, or other regulatory compliance would be adequate where there is no state certification requirement. To verify that the EEL circuit terminates into a section 251(c)(6) collocation, circuit facility assignment on the order would be sufficient supporting evidence.[1908] The local interconnection component of the third criterion can be established after examination of the governing interconnection agreement and the physical circuit connections. We emphasize that these records are only examples of the documentation that carriers should keep, and not intended to be an exhaustive list. Due to the variation in telecommunications systems and technology, and to provide flexibility to competitive LECs in establishing the most efficient architectural arrangements to provide local voice service, we do not adopt any of the specific

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[1907] We note that audited carriers should account for the staff time and other appropriate costs for responding to the audit (*e.g.*, collecting data in response to the auditor's inquiries, meeting for interviews, etc).

[1908] *See* Letter from Julia O. Strow, Vice President—Regulatory & Legislative Affairs, Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (filed Jan. 6, 2003).

documentation requirements proposed by some carriers in this proceeding.[1909]

D. Modification of Existing Network

1. Background

630. In *Iowa Utilities Board*, the Eighth Circuit held that section 251(c)(3) requires "unbundled access only to an incumbent LEC's existing network—not to a yet unbuilt superior one."[1910] Specifically, the Eighth Circuit explained that incumbent LECs can be required to modify their facilities "to the extent necessary to accommodate interconnection or access to network elements," but cannot be required "to *alter substantially* their networks in order to provide *superior* quality interconnection and unbundled access."[1911]

631. In the *Triennial Review NPRM*, the Commission sought comment on its authority to require incumbent LECs to engage in activities necessary to activate loops that are not currently activated in the network.[1912] The Commission also asked about the extent to which incumbent LECs have an obligation to modify their existing networks in order to provide access to network elements.[1913] Commenters identified several specific issues regarding the interpretation of the Eighth Circuit's holding, most notably in which situations incumbent LECs have responded to an order for high-capacity loop by attaching equipment and facilities to its

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[1909] *See, e.g.*, Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, Attach. at 1 (filed Feb. 13, 2003) (Qwest Feb. 13, 2003 Proposed EELs Safe Harbors *Ex Parte* Letter) (listing proposed documentation requirements, including the Qwest-designated "26 code" for each local interconnection trunk group).

[1910] *Iowa Utils. Bd. v. FCC*, 120 F.3d at 813.

[1911] *Id.* at 813 n.33 (emphasis added).

[1912] *Triennial Review NPRM*, 16 FCC Rcd at 22805, para. 52.

[1913] *Id.* at 22811-12, paras. 65-66.

network, or could issue a "no facilities available" response; whether carriers must remove equipment from a line in order to condition it; and the extent to which specially constructed transmission facilities are subject to unbundling obligations. To resolve these related questions about the scope of the incumbent LEC network that must be unbundled and which modifications constitute "construction," and because they share a fundamental relationship to the definition of the network, we address them together in this section.

2. Discussion

a. Routine Network Modifications to Existing Facilities

632. We require incumbent LECs to make routine network modifications to unbundled transmission facilities used by requesting carriers where the requested transmission facility has already been constructed. By "routine network modifications" we mean that incumbent LECs must perform those activities that incumbent LECs regularly undertake for their own customers. Routine modifications, however, do not include the construction of new wires (*i.e.*, installation of new aerial or buried cable) for a requesting carrier. The routine modification requirement that we adopt today resolves a controversial competitive issue that has arisen repeatedly, in both this proceeding and in the context of several section 271 applications, and is designed to provide competitive carriers with greater certainty as to the availability of unbundled high-capacity loops and other facilities throughout the country.

633. Parties in the record disagree where the boundary exists between, on one hand, modifying the loop element to provide competitive LECs with access to all the functions of that element,[1914] and, on the other, requiring substantial

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[1914] *See Iowa Utils. Bd. v. FCC*, 120 F.3d at 808-09 (holding that providing access to a network element includes the full functionality of that element).

alteration of the loop facility to provide superior quality access. In particular, competitive LECs assert that certain incumbent LECs have taken an exceedingly narrow interpretation of their obligations to furnish high-capacity loops and request that the Commission clarify the scope of the loop unbundling obligation.[1915] We conclude that incumbent LECs, in provisioning high-capacity loop facilities to competitors, must make the same routine modifications to their existing loop facilities that they make for their own customers. This conclusion is consistent with the Eighth Circuit's ruling. Specifically, requiring incumbent LECs to engage in activities necessary to activate loops that are not currently activated in the network complies with the Eighth Circuit's holding that the obligations imposed by sections 251(c)(2) and 251(c)(3) include modifications to the incumbent LEC's facilities to the extent necessary to accommodate access to existing network elements—in this case, high-capacity loops.[1916] Were we not to adopt such a requirement, the incumbent LECs would have the ability to dictate the parameters of their unbundling requirements and thereby readily thwart competitors' ability to obtain access to high-capacity loops.

634. Due to the continually evolving and dynamic nature of telecommunications networks, however, we reject the

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[1915] *See, e.g.*, NewSouth Reply at 38.

[1916] *Iowa Utils. Bd. v. FCC*, 120 F.3d at 813 n.33. Because the Eighth Circuit struck down the Commission's "superior quality" rules and that decision is final, we conform our regulations accordingly. *See also* NewSouth Reply at 40. NewSouth also proposes that the Commission clarify that "existing facilities" includes incumbent LEC facilities available in the existing service area where the request is made, not just facilities available for the specific origination and termination points for the element requested. NewSouth Comments at 40. Rather than adopting such a geographic test, however, we conclude that the routine modification requirement described herein more accurately defines an incumbent LEC's responsibilities, and, further, is more administratively practical.

argument that our rule should list the precise electronics that the incumbent LEC must add to the loop in order to transform a DS0 voice-grade loop to an unbundled DS1 loop. Rather, our operating principle is that incumbent LECs must perform all loop modification activities that it performs for its own customers. By way of illustration, we find that loop modification functions that the incumbent LECs routinely perform for their own customers, and therefore must perform for competitors, include, but are not limited to, rearrangement or splicing of cable;[1917] adding a doubler or repeater;[1918] adding an equipment case;[1919] adding a smart jack;[1920] installing a repeater shelf; adding a line card; and deploying a new multiplexer or reconfiguring an existing multiplexer.[1921]

[1917] Letter from Stephen W. Crawford, General Counsel, El Paso Global Networks to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 2 (filed Dec. 17, 2002) (El Paso Dec. 17, 2002 *Ex Parte* Letter).

[1918] Although a digital signal loses its shape as it transverses a circuit due to noise and attenuation, a repeater can read the weakened and distorted signal and retransmit it at the proper level of signal strength. NEWTON'S TELECOM DICTIONARY 623 (defining "repeater"). A DS1 loop generally requires line repeaters to be placed approximately every mile along its cable route in order to maintain signal integrity. Virginia State Corporation Commission Staff Reply at 4.

[1919] Line repeaters are housed in apparatus cases, and cable pairs are either spliced into a case to serve a specific end user via an assigned service terminal, or are pre-assigned along a route with splicing occurring at or near the end user's service terminal in order to access the needed cable pairs. *Id.* at 4-5.

[1920] Mpower Reply at 30. A smart jack is a device installed on the customer premises that tests the integrity of DS1 circuits, and is activated remotely from the central office without having to dispatch a technician to the site. NEWTON'S TELECOM DICTIONARY 677 (18th ed. 2002) (defining "smart jack").

[1921] Letter from Mary C. Albert, Vice President—Regulatory and Interconnection, Allegiance, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (dated Sept. 30, 2002)

635. The record reveals that attaching routine electronics, such as multiplexers, apparatus cases, and doublers, to high-capacity loops is already standard practice in most areas of the country.[1922] Moreover, performing such functions is easily accomplished. The record shows that requiring incumbent LECs to make the routine adjustments to unbundled loops discussed above that modify a loop's capacity to deliver services in the same manner as incumbent LECs provision such facilities for themselves is technically feasible[1923] and

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(Allegiance Sept. 30, 2002 *Ex Parte* Letter), *in* Letter from Mary C. Albert, Vice President—Regulatory Interconnection, Allegiance, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Oct. 1, 2002); El Paso Dec. 17, 2002 *Ex Parte* Letter, Declaration of Javier Galindo (El Paso Galindo Decl.) at paras. 10, 15; *see also Petitions of WorldCom, Inc., Cox Virginia Telcom, Inc., and AT&T Communications of Virginia, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes With Verizon Virginia, Inc. and For Expedited Arbitration*, CC Docket Nos. 00-218, 00-249, 00-251, 17 FCC Rcd 27039, 27283 n.1658 (WCB 2002) ("Verizon cannot refuse to provision a particular loop by claiming that multiplexing equipment is absent from the facility. In that case, Verizon must provide the multiplexing equipment, because the requesting carrier is entitled to a fully functioning loop."); *see also* Letter from Patrick J. Donovan, Counsel for Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (filed Nov. 23, 2002) (Cbeyond Nov. 23, 2002 *Ex Parte* Letter).

[1922] The record reflects that different incumbent LECs perform varying degrees of network modifications when provisioning unbundled high-capacity loops. *See, e.g.*, Letter from Patrick J. Donovan, Counsel for Cbeyond, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (Cbeyond Dec. 16, 2002 No Facilities *Ex Parte* Letter), Declaration of Richard Batelaan at paras. 8-9 (filed Dec. 16, 2002) (discussing the different "no facilities" policies of Qwest, SBC, and Verizon).

[1923] *See* Allegiance Sept. 30, 2002 *Ex Parte* Letter at 5, Attach. 4 (citing Verizon Maryland, Inc.'s response to a data request stating "[g]enerally speaking, Verizon MD does not reject DS1 requests for end users due to no facilities.").

presents no significant operational issues.[1924] In fact, the routine modifications that we require today are substantially similar activities to those that the incumbent LECs currently undertake under our line conditioning rules.[1925] Specifically, based on the record, high-capacity loop modifications and line conditioning require comparable personnel; can be provisioned within similar intervals; and do not require a geographic extension of the network.[1926]

636. We do not find, however, that incumbent LECs are required to trench or place new cables for a requesting carrier. Requests for altogether new transmission facilities, whether serving an existing customer or along a new route, demand far more planning, engineering, and technical resources than the routine modifications discussed above, and include rights-

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[1924] *See* Allegiance Sept. 30, 2002 *Ex Parte* Letter at 2.

[1925] *See infra* Part VII.D.2.b. Specifically, in the *UNE Remand Order*, the Commission held that incumbent LECs must remove certain devices, such as bridge taps, low-pass filters, and range extenders, from basic copper loops in order to enable the requesting carrier to offer advanced services. *UNE Remand Order*, 15 FCC Rcd at 3775, para. 172. Although Verizon rejects unbundled DS1 loop orders where there is no apparatus or doubler case on the loop claiming that installation of these cases is "complex"—requiring a truck roll to either dig up existing cable or a "bucket" to reach aerial cables in order to splice open the cable sheath—it must perform similar activities to accommodate line conditioning requests. *See* Letter from W. Scott Randolph, Director—Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4-5 (filed Oct. 18, 2002) (Verizon Oct. 18, 2002 No Facilities *Ex Parte* Letter); *see also* El Paso Galindo Decl. at para. 14 ("When an ILEC outside plant technician conditions a copper loop for xDSL by removing bridged tap and Load Coils in the loop, the work is generally performed by the same staff that performs rearrangement for DS1 services.").

[1926] *See* Cbeyond Nov. 23, 2002 *Ex Parte* Letter at 3. Furthermore, these routine modifications are generally provided by incumbent LECs within relatively short intervals. Mpower Reply at 29 (stating that Verizon's customers "[i]n almost every instance . . . can order service and have it installed within one week.").

of-way issues, greater demands for on-site construction personnel, and substantial periods of actual construction.[1927] We believe, however, the physical work and technical requirements required to perform routine modifications described above do not implicate these concerns and are therefore encompassed in the incumbent LECs' unbundling requirements.[1928]

637. Further, activities such as accessing manholes, splicing into existing cable, deploying bucket trucks to reach aerial cable, and installing equipment casings do not render a modification a substantial alteration or constitute the provision of a superior unbuilt network.[1929] Rather, these activities can be described as comprising the "routine, day-to-day work of managing an [incumbent LEC's] network."[1930] That is, rather than encompassing extensive delays caused by, for example, securing permits or rights-of-way, constructing new manholes or conduits, or installing altogether new terminals, the routine modifications described above

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[1927] Verizon Oct. 18, 2002 No Facilities *Ex Parte* Letter at 1-6.

[1928] *See* Cbeyond Dec. 16, 2002 *Ex Parte* Letter at 2-3 (describing the routine tasks that Verizon performs to operate, maintain, and repair its network).

[1929] *See* Verizon Oct. 18, 2002 No Facilities *Ex Parte* Letter at 1-6.

[1930] Letter from Jake E. Jennings, NewSouth, to Christopher Libertelli, Legal Advisor, Office of Chairman Michael K. Powell, FCC, CC Docket Nos. 01-338, 96-98 at 3 (filed Nov. 6, 2002) (NewSouth Nov. 6, 2002 *Ex Parte* Letter). While we largely agree with NewSouth's proposed definition of UNE availability, we believe that adopting a definition that attempts to list various pieces of electronics provides an opportunity for gaming by incumbent LECs, *i.e.*, if each and every piece of equipment that modifies a DS0 loop to a DS1 loop is not listed, the incumbent LEC may reject an order for no facilities available. *Id.* at 6-7. Instead, in addition to providing several examples of routine modifications incumbent LECs are required to provide we describe various factors, such as personnel requirements and timeliness, that determine whether the modification is routine or provides access to a superior quality network.

generally require incumbent LEC personnel to visit sites within the existing and readily accessible incumbent LEC architecture. We therefore conclude that the local loop definition includes routine modifications and we require incumbent LECs to add types of electronics that incumbent LECs ordinarily attach to a loop for a customer requiring a DS1 loop, even if such electronics are not attached to a particular loop.[1931]

638. Several carriers comment that the difficulties in accessing facilities includes access to dark fiber loops and transport, as well as to lit DS1 loops.[1932] The requirement we establish for incumbent LECs to modify their networks on a nondiscriminatory basis is not limited to copper loops, but applies to all transmission facilities, including dark fiber facilities. For example, several state commissions have rejected incumbent LEC attempts to deny competitive access to dark fiber where a competitive LEC seeks access to the network in the same manner as the incumbent LEC.[1933] Incumbent LECs must make the same routine modifications to their existing dark fiber facilities for competitors that they make for their own customers—including the work done on dark fiber to provision lit capacity to end users. Although the

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[1931] We agree with Mpower that requiring incumbent LECs to attach electronics that they routinely provide to their customers does not constitute the provision of a new network element. Mpower Reply at 29-30; *see also* Covad Comments at 45; NewSouth Comments at 19-20; ALTS *et al.* Comments at 116-17; Sprint Comments at 20, 26.

[1932] *See, e.g.*, Dominion Jan. 28, 2003 Aamoth *Ex Parte* Letter at 5 (claiming that incumbent LECs change their standard loop provisioning practice by laying new loop fiber without terminating it in order to avoid compliance with unbundling obligations).

[1933] *See, e.g., New England Telephone and Telegraph Company d/b/a NYNEX*, Decision D.P.U./D.T.E. 96-73/74, 96-75, 96-80/81, 96-83, 96-94—Phase 3, at 48 (Mass. DTE Dec. 4, 1996) ("We therefore see little distinction between a splice performed on behalf of NYNEX and that performed for another carrier.").

record before us does not support the enumeration of these activities in the same detail as we do for lit DS1 loops, we encourage state commissions to identify and require such modifications to ensure nondiscriminatory access.

639. We reject Verizon's argument that the Commission lacks authority to compel incumbent LECs to deploy new equipment to meet the demands of a competitive carrier.[1934]

[1934] Verizon Comments at 62; *see also* Verizon Reply at 99 n.310; Letter from Susanne Guyer, Senior Vice President, Federal Regulatory Affairs, Verizon, to William F. Maher, Chief, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1-2 (filed Jan. 17, 2003), *in* Letter from Susanne Guyer, Senior Vice President, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC (dated Jan. 17, 2003) (Verizon Jan. 17, 2003 Guyer *Ex Parte* Letter). Verizon's policies concerning high-capacity loops have also arisen in context with its section 271 obligations, *i.e.*, checklist item 4—unbundled local loops. In the *Verizon Pennsylvania 271* proceeding, several competing carriers alleged that Verizon violates the Commission's rules by refusing to provide high-capacity loops as UNEs unless all necessary equipment and electronics are present on the line and at the customer's premises. *Application of Verizon Pennsylvania Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks Inc., and Verizon Select Services Inc. for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, CC Docket No. 01-138, Memorandum Opinion and Order, 16 FCC Rcd 17419, 17469-70, para. 91 (2001). Ultimately, the Commission was unable to find in the *Verizon Pennsylvania 271* proceeding that Verizon's high-capacity loop policy expressly violates the Commission's unbundling rules. *Id.* at 17470, para. 92 ("We disagree with commenters that Verizon's policies and practices concerning the provisioning of high-capacity loops, as explained to us in the instant proceeding, expressly violate the Commission's unbundling rules."). Instead the Commission relied on its policy that new interpretative disputes concerning the precise content of an incumbent LEC's obligations to its competitors, or disputes that the Commission's rules have not yet addressed and that do not involve *per se* violations of the Act or the Commission's rules, are not appropriately dealt with in the context of a section 271 proceeding. To the extent parties have specific disputes with Verizon's actual practice in implementing its high-capacity loop policies, the Commission explained that such disputes are best addressed

Verizon contends that the Commission cannot require incumbent LECs to *add* capacity or circuits, including constructing and modifying loops by adding electronics, where these facilities do not already exist.[1935] That is, Verizon argues that these modifications are not necessary to provide access to existing UNEs, they are the "creation of *new or improved* UNEs" that would unlawfully force an incumbent LEC to provide superior quality access.[1936] In particular,

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in an alternative forum. *Id.* (citing *Verizon Massachusetts Order*, 16 FCC Rcd at 8993, para. 10).

[1935] Verizon states that it will fill a competitive LEC's unbundled high-capacity loop order where "the facilities necessary to provision the service requested exist and are currently available." Verizon Oct. 18, 2002 No Facilities *Ex Parte* Letter at 2. That is, Verizon states that it will provision unbundled high-capacity loops where equipment need only be removed, but not when certain equipment must be added. The six situations where Verizon argues it is not required to undertake construction, *i.e.*, where orders are rejected for "no facilities available" are: (1) no available copper spares, (2) no apparatus/doubler case, (3) no central office or remote terminal repeater equipment, (4) no riser cable or buried drop, (5) no fiber or multiplexer (DS1s and DS3s over fiber), or (6) no capacity for the service requested on existing multiplexer (DS1s and DS3s over fiber). *Id.* at 3-7. The percentages of competitive LEC high-capacity loop orders rejected by Verizon between January and June 2002 in the former Bell Atlantic South states for these six "no facilities" situations, respectively, are: 12%, 45.2%, 4.6%, 0.4%, 30.5%, and 3.5%. *Id.*

[1936] Verizon Comments at 63-64 (emphasis in original). Nonetheless, Verizon states that it will make certain changes to available wires in order to provision high-capacity loops. Specifically, in its comments, Verizon states that:

> Verizon's current policy is to add certain electronics to available wire or fiber facilities to fill a [competitive] LEC's order for an unbundled DS1 loop. When Verizon receives an order for an unbundled DS1 loop, it checks whether the required common equipment is installed in the central office and has available ports or slots. If there is capacity, Verizon will install the necessary line cards. Verizon also will cross-connect the common equipment to the wire or fiber facility running to the end user. At the end user's premises, Verizon terminates the DS1

Verizon claims that the Commission is barred from requiring incumbent LECs to build a new loop, place new line cards or electronics on a circuit, and provide line conditioning, because these are all "substantial alterations to an ILEC's existing network."[1937] We disagree and, with the exception of constructing an altogether new local loop, we find that requiring an incumbent LEC to modify an existing transmission facility in the same manner it does so for its own customers provides competitors access only to a functionally equivalent network, rather than one of superior quality. Indeed, incumbent LECs routinely add a drop for a second line without objection.[1938] We conclude that with the exception of building a loop from scratch by trenching or pulling cable, because incumbent LECs are able to provide routine modifications to their customers with relatively low expense and minimal delays, requesting carriers are entitled to the same attachment of electronics.[1939] Lastly, to the extent that certain routine network modifications to existing loop

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loop in the appropriate NID. This practice goes well beyond Verizon's legal obligations under the Act.

Id. at 64 n.218.

[1937] Verizon Comments at 63.

[1938] We note that it is only with respect to DS1 loops that certain incumbent LECs seem to argue that they are under no obligation to modify loops from their existing condition.

[1939] The record reflects that Verizon provides the routine modifications listed above with minimal delay, in most cases, to their own retail customers. Covad Comments at 51. We also dismiss Verizon's claim that the availability of special access services on a par with Verizon's own retail customers is fully compliant with the Act, and in particular Verizon's recently instituted "procedure under which it voluntarily allows carriers whose UNE orders are rejected for lack of facilities to purchase Verizon's special access service and later convert it to a UNE after a minimum in-service period (provided it meets the conversion criteria established by the Commission)." Verizon Jan. 17, 2003 Guyer *Ex Parte* Letter at 1, 3. We find this policy to be discriminatory on its face.

facilities affect loop provisioning intervals, contained in, for example, section 271 performance metrics, we expect that states will address the impact of these modifications as part of their recurring reviews of incumbent LEC performance.

640. The Commission's pricing rules provide incumbent LECs with the opportunity to recover the cost of the routine network modifications we require here.[1940] State commissions have discretion as to whether these costs should be recovered through non-recurring charges or recurring charges. We note that the costs associated with these modifications often are reflected in the recurring rates that competitive LECs pay for loops. Specifically, equipment costs associated with modifications may be reflected in the carrier's investment in the network element, and labor costs associated with modifications may be recovered as part of the expense associated with that investment (*e.g.*, through application of annual charge factors (ACFs)). The Commission's rules make clear that there may not be any double recovery of these costs (*i.e.*, if costs are recovered through recurring charges, the incumbent LEC may not also recover these costs through a NRC).[1941]

641. A number of parties filed petitions for reconsideration of the *UNE Remand Order* asking the Commission to find

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[1940] *See Local Competition Order*, 11 FCC Rcd at 15847, para. 682 ("Directly attributable forward-looking costs include the incremental costs of facilities and operations that are dedicated to the element. Such costs typically include the investment costs and expenses related to primary plant used to provide that element."); *see also id.* at 15851, para. 691 ("Costs must be attributed on a cost-causative basis. Costs are causally-related to the network element being provided if the costs are incurred as a direct result of providing the network elements, or can be avoided, in the long run, when the company ceases to provide them.").

[1941] 47 C.F.R. § 51.507(e) ("Nonrecurring charges shall be allocated efficiently among requesting telecommunications carriers, and shall not permit an incumbent LEC to recover more than the total forward-looking economic cost of providing the applicable element.").

that charges for certain types of network modification (loop conditioning, unbundling of IDLC loops) were inconsistent with the Commission's TELRIC pricing rules.[1942] We deny these petitions. The petitions raise complicated economic and technical issues that the Commission would prefer to address on a more complete and up-to-date record. Accordingly, we will include these issues in the Commission's upcoming proceeding on TELRIC-related issues. In the interim, we leave it to state commissions to decide in the first instance whether a particular cost should be recovered from a competitive LEC through a recurring charge, a non-recurring charge, or not at all, in accordance with the principles identified above.[1943] A state commission could decide, for example, that loop conditioning costs should be recovered through a NRC only in extraordinary situations, such as removing load coils on loops that exceed 18,000 feet in length,[1944] and that any other conditioning costs should be

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[1942] *See* Petition of MCI WorldCom Feb. 17, 2000 Petition for Reconsideration at 15-18 (loop conditioning); Rhythms Netconnections, Inc. and Covad Communications Company Joint Petition for Reconsideration, CC Docket Nos. 95-185, 96-98 (filed Jan. 21, 2000) (loop conditioning); @Link Networks, Inc. *et al.* Joint Petition for Reconsideration, CC Docket No. 96-98 (filed Feb. 17, 2000) (loop conditioning); McLeodUSA Telecommunications Services, Inc. Petition for Reconsideration, CC Docket No. 96-98 (filed Feb. 17, 2000) (unbundling of IDLC loops).

[1943] Accordingly, we grant WorldCom's Petition for Clarification to the extent it seeks clarification that states have discretion to conclude that loop conditioning costs are not forward-looking costs or that they are more appropriately recovered through recurring charges for the loop. *See* Petition of MCI WorldCom Feb. 17, 2000 Petition for Clarification at 13-15.

[1944] The Commission recognized in the *UNE Remand Order* that "networks built today should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter." *UNE Remand Order*, 15 FCC Rcd at 3784, para. 193.

recovered in recurring charges just like other loop maintenance costs.

b. Line Conditioning

642. As noted above, we conclude that incumbent LECs must provide access, on an unbundled basis, to xDSL-capable stand-alone copper loops because competitive LECs are impaired without such loops.[1945] Such access may require incumbent LECs to condition the local loop for the provision of xDSL-capable services.[1946] Accordingly, we readopt the Commission's previous line and loop conditioning rules for the reasons set forth in the *UNE Remand Order*.[1947] Line conditioning is necessary because of the characteristics of xDSL service—that is, certain devices added to the local loop in order to facilitate the provision of voice service disrupt the capability of the loop in the provision of xDSL services. In particular, bridge taps, load coils, and other equipment disrupt

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[1945] *See supra* Part VI.A.4.a.(v)(a).

[1946] In the *UNE Remand Order*, the Commission made clear that incumbent LECs must condition loops to allow requesting carriers to offer advanced services, and identified the removal of bridge taps, load coils, and similar devices as part of this obligation. *UNE Remand Order*, 15 FCC Rcd at 3775, para. 172. The Commission specifically rejected the contention that the Eighth Circuit's holding on "superior quality" overturned the rules requiring incumbents to provide conditioned loops even where the incumbent itself is not providing advanced services to those customers. *Id.* at 3775, para. 173 ("We find that loop conditioning, rather than providing a 'superior quality' loop, in fact enables a requesting carrier to use the basic loop."). The Commission subsequently refined the conditioning obligation to cover loops of any length, to recognize the potential degradation of analog voice service, and to enable incumbent LECs to charge for conditioning loops. *Line Sharing Order*, 14 FCC Rcd 20912, 20951-53, paras. 81-87.

[1947] We note that the *USTA* court did not expressly opine on the Commission's line and loop conditioning rules.

xDSL transmissions.[1948] Because providing a local loop without conditioning the loop for xDSL services would fail to address the impairment competitive LECs face, we require incumbent LECs to provide line conditioning to requesting carriers.

643. Line conditioning does not constitute the creation of a superior network, as some incumbent LECs argue.[1949] Instead, line conditioning is properly seen as a routine network modification that incumbent LECs regularly perform in order to provide xDSL services to their own customers. As noted above, incumbent LECs must make the routine adjustments to unbundled loops to deliver services at parity with how incumbent LECs provision such facilities for themselves. Similarly, in order to provide xDSL services to their own customers, incumbent LECs condition the customer's local loop.[1950] Thus, line conditioning is a term or condition that incumbent LECs apply to their provision of loops for their own customers and must offer to requesting carriers pursuant to their section 251(c)(3) nondiscrimination obligations. We therefore agree with the commenters that argue that requiring the conditioning of xDSL-capable loops is not mandating superior access,[1951] and reject Verizon's renewed challenge

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[1948] *See* Telcordia Technologies, Inc. NOTES ON DSL at 2-10 to 2-16 (describing limitations of xDSL service); Padmanand Warrier and Balaji Kumar, xDSL ARCHITECTURE 95-97 (2000) (describing the effect of bridge taps, load coils, various gauges of copper cable, and analog/digital conversions on xDSL transmissions); *see also Line Sharing Order*, 14 FCC Rcd at 20951-52, para. 83.

[1949] *See* Verizon Jan. 17, 2003 Guyer *Ex Parte* Letter at 3-4 (arguing that line conditioning constitutes the creation of a superior network).

[1950] We note that all BOCs offer xDSL service throughout their service areas. *See, e.g.*, Verizon, *Verizon Online DSL for Your Home Including Personal or Office Use and Price Packages for DSL*, <http://www22.verizon.com/ForHomeDSL/channels/dsl/forhomedsl.asp> (describing Verizon's xDSL offerings for residential customers).

[1951] *See, e.g.*, NuVox *et al.* Reply at 43; WorldCom Reply at 42-43.

that the Commission lacks authority to require line conditioning.[1952] Competitors cannot access the loop's inherent "features, functions, and capabilities" unless it has been stripped of accretive devices. We therefore view loop conditioning as intrinsically linked to the local loop and include it within the definition of the loop network element.[1953]

644. As a final matter, we determine that requiring incumbent LECs to perform line conditioning advances our section 706 goals.[1954] Specifically, line conditioning speeds the deployment of advanced services by ensuring that competitive LECs are able to obtain, as a practical matter, a local loop UNE with the features, functions, and capabilities necessary to provide broadband services to the mass market. Consistent with our analysis for mass market loops, then, we

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[1952] Verizon Comments at 63 (arguing that "loop conditioning plainly is an unlawful requirement to provide a superior quality network."). More specifically, we do not accept Verizon's contention that line conditioning is a "significant construction activity" that provides a "*superior* quality network facility." Jan. 17, 2003 Verizon Guyer *Ex Parte* Letter at 4.

[1953] As the Commission noted in the *UNE Remand Order*, the Eighth Circuit expressly affirmed the Commission's determination that section 251(c)(3) requires incumbent LECs to provide modifications to their facilities in order to accommodate access to network elements. *UNE Remand Order*, 15 FCC Rcd at 3775, para. 173 (citing *Iowa Utils. Bd. v. FCC*, 120 F.3d at 813, n.33). With respect to making routine network modifications, the Eighth Circuit stated: "Although we strike down the Commission's rules requiring incumbent LECs to alter substantially their networks in order to provide superior quality interconnection and unbundled access, we endorse the Commission's statement that 'the obligations imposed by sections 251(c)(2) and 251(c)(3) include modifications to incumbent LEC facilities to the extent necessary to accommodate interconnection or access to network elements.'" *Iowa Utils. Bd. v. FCC*, 120 F.3d at 813, n.33 (citing *Local Competition Order*, 11 FCC Rcd at 15602-03, para. 198).

[1954] As we noted in our unbundling analysis for mass market loops, section 706 informs the manner in which we craft our unbundling obligations. *See supra* Part VI.A.4.a.(iv).

conclude that the unbundling obligations of incumbent LECs include conditioning loops for the provision of xDSL services.

c. Special Construction of Transmission Facilities

645. We do not require incumbent LECs to construct transmission facilities so that requesting carriers can access them as UNEs at cost-based rates. As the Commission concluded in the *UNE Remand Order*, although "an incumbent LEC's unbundling obligation extends throughout its ubiquitous transport network, including ring transport architectures, we do not require incumbent LECs to construct new transport facilities to meet specific competitive LEC point-to-point demand requirements for facilities that the incumbent LEC has not deployed for its own use."[1955] Although we recognize that our conclusion in this Order not to unbundle inter-network transport facilities, including circuits from the incumbent LEC network to CMRS to base stations and mobile switching centers, will diminish the significance of this issue for many commenters, the issues surrounding special construction play an important role in infrastructure growth for new channel termination and transport facilities.

646. At present, incumbent LECs generally offer to build out transmission facilities to a customer's specific needs through the special construction provisions of their special access tariffs or a stand-alone special construction tariff.[1956] These provisions typically contain NRCs and termination liabilities over a fixed term to ensure compensation in the event that the customer defaults or otherwise cancels its

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[1955] *UNE Remand Order*, 15 FCC Rcd at 3843, para. 324.

[1956] These facilities include entrance facilities, connections from the incumbent LEC tandem office to a CMRS mobile base station, and other inter-network facilities for which no unbundling is required. *See supra* Part VI.C.

contract prior to the expiration of its term commitment.[1957] Because our unbundling rules do not require incumbent LECs to be construction agents for requesting carriers, this limitation on the incumbent LEC unbundling obligation provides a critical safeguard against excessive unbundling at UNE prices.[1958] To the extent that commenters require such special construction and new facilities, they may purchase this as a service from the incumbent LEC special access tariff.

647. We reject the argument advanced by certain incumbent LECs, however, that specially constructed facilities, once constructed, are to be permanently exempted from unbundling obligations. These carriers contend that all of their SONET rings are built to the customer's definitive request, and that such customized facilities are not required to be unbundled by future requesting carriers.[1959] In support of this position, the incumbent LECs rely heavily on the *UNE Remand Order*'s statement that "[n]otwithstanding the fact that we require incumbents to unbundle high-capacity

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[1957] *See, e.g.*, National Exchange Carriers Association, Tariff FCC No. 3 (Special Construction), § 2.6.4.

[1958] *See, e.g.*, Sprint Comments at 54 (recommending conditions where an incumbent LEC is obligated to undertake construction that include where the requesting carrier is willing to pay TELRIC-based non-recurring charges).

[1959] BellSouth Comments at 56-57; BellSouth Reply at 41-42; *see also* Qwest Comments at 40 (explaining that it undertook construction for CMRS providers pursuant to the specification of those carriers); Letter from John W. Kure, Executive Director—Federal Policy and Law, Qwest, to Magalie Roman Salas, Secretary, FCC, CC Docket No. 96-98, Attach. at 3 (filed Sep. 26, 2001) (arguing that optic fiber rings built for wireless carriers are not part of the Qwest "ubiquitous transport network."). As we explain in Part VI.C., *supra*, our interoffice transport rules are technology neutral, and SONET rings are subject to unbundling obligations in the same manner as any other transport facility. Although many commenters raise issues of special construction and SONET ring unbundling in the context of CMRS provider access to UNEs, our discussion here addresses all facilities.

transmission facilities, we reject Sprint's proposal to require incumbent LECs to provide unbundled access to SONET rings."[1960] Regardless of the Commission's decision not to adopt a specific proposal in a prior proceeding, we clarify that an incumbent LEC's unbundling obligation includes all deployed transmission facilities in its network, unless specifically exempted in this Order.[1961] So long as a requesting carrier seeks access to an already existing transmission facility for which it is impaired, we do not deny access simply because the facility was constructed to the specifications of that carrier or another carrier.

648. To ensure that no incumbent LEC is obligated to build out facilities at TELRIC pricing, we clarify that the tariffed termination liabilities for special construction apply to the conversion of special access circuits built to customer specification. In this manner, no incumbent LEC will be uncompensated for constructing facilities—the tariffed non-recurring charges and termination liabilities that protect incumbent LECs from uncompensated build-outs where a competitor seeks to terminate a contract provide the same protection against UNE conversion.[1962] Competitors have commented broadly that no termination liabilities should

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[1960] BellSouth Reply at 42 (citing *UNE Remand Order*, 15 FCC Rcd at 3843, para. 324); Qwest Comments at 40.

[1961] We affirm that for those facilities that incumbent LECs do not have to provide on an unbundled basis to competitors, incumbent LECs may deploy them in their networks without making them available as UNEs on a nondiscriminatory basis.

[1962] Accordingly, the incumbent LEC concerns about lack of compensation are misplaced. *See, e.g.*, Qwest Comments at 40 ("Qwest agrees to undertake this construction only because the CMRS providers promised to compensate Qwest the tariffed price for these circuits. Qwest would not have constructed, nor would it have been obligated under the Commission's rules to construct, the circuits at the non-compensatory rates demanded by the CMRS providers.") (citations omitted).

apply to any conversions from special access to UNEs.[1963] While much of their focus appears directed toward those penalties triggered by long-term contracts, including stand-alone loop facilities, we are not persuaded to grant them relief from termination liabilities for special construction.[1964]

VIII. REMAINING ISSUES

A. Section 271 Issues

1. Background

649. As detailed above, section 251 of the Act is the source of incumbent LECs' unbundling obligations. Section 251(c)(3) requires all incumbent LECs (including BOCs) to provide "nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory."[1965] Section 251(d)(2) directs the Commission to determine whether access to particular proprietary elements is *necessary* and whether the unavailability of non-proprietary elements would *impair* a competitor's ability to provision service.[1966] These section 251

[1963] *See, e.g.*, NuVox *et al.* Reply at 52 ("As part of this [fresh look] proposal, all special access circuits (whether equivalent to standalone UNEs, EELs or some other UNE combination) should be subject to conversion without termination penalties or imposition of nonrecurring charges other than a cost-based conversion charge designed exclusively to recover administrative expenses associated with converting associated billing from special access to UNE billing."); ALTS *et al.* Comments at 103 ("Furthermore, the FCC should mandate that no termination liability charges are to be assessed to CLECs converting circuits to UNE pricing.")

[1964] We address the specific issue of granting "fresh look" relief for conversions of EELs ordered during the vacatur of the Commission's combination rules in Part VIII.C. below.

[1965] 47 U.S.C. § 251(c)(3).

[1966] *Id.* § 252(d)(2). We note that to the extent an incumbent LEC is providing network elements pursuant to section 251(c)(3), section

obligations are referenced and incorporated as obligations of BOCs under section 271(c)(2)(B)(ii) of the Act.[1967]

650. Section 271 establishes both the procedures by which a BOC may apply to provide interLATA services in one of its in-region states and the substantive standards by which that application must be judged. In particular, section 271(c)(2)(B) of the Act specifies the "competitive checklist" of access and interconnection requirements that BOCs must meet before they are allowed to offer in-region long-distance services.[1968] Four of these checklist items relate to network elements in earlier orders the Commission has deemed to be UNEs under the standards of section 251(c)(3). In particular, checklist items 4 through 6 and 10 require: "[l]ocal loop transmission from the central office to the customer's premises, unbundled from local switching or other services;"[1969] "[l]ocal transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services;"[1970] "[l]ocal switching unbundled from transport, local loop transmission, or other services,"[1971] and "[n]ondiscriminatory access to databases and associated signaling necessary for call routing and completion."[1972]

651. In the *Triennial Review NPRM*, the Commission sought comment on how the access requirements specified in the section 271 competitive checklist relate to the unbundling requirements derived from sections 251(c)(3) and 251(d)(2). The Commission first noted its conclusion in the *UNE*

252(d)(1) further requires that it provide such elements at rates that are nondiscriminatory and cost-based. *Id.* § 252(d)(1).

1967 *Id.* § 271(c)(2)(B)(ii).

1968 *Id.* § 271(c)(2)(B).

1969 *Id.* § 271(c)(2)(B)(iv).

1970 *Id.* § 271(c)(2)(B)(v).

1971 *Id.* § 271(c)(2)(B)(vi).

1972 *Id.* § 271(c)(2)(B)(x).

Remand Order that BOCs must continue to provide access to those network elements described in checklist items 4-6 and 10, even if such access is not mandated under section 251 (and checklist item 2).[1973] The Commission also concluded, in that Order, that market prices should be permitted to prevail for such network elements, rather than requiring forward-looking prices.[1974] The *Triennial Review NPRM* sought additional comment on these conclusions, on "how to evaluate a checklist item where there is no unbundling requirement for the network element that corresponds to that checklist item, and on the appropriateness of evaluating a tariffed service that corresponds to that network element."[1975]

652. Some commenters seek to alter the Commission's determination in the *UNE Remand Order* that section 271 establishes a separate BOC access obligation for network elements no longer listed under section 251(c)(3) and its conclusion that the marketplace, rather than our TELRIC methodology, should determine the price for delisted network elements under section 271. For example, Verizon argues that once the Commission has determined that a network element is not necessary under section 251(d)(2), the corresponding checklist item should be construed as being satisfied.[1976] Several competitive carriers counter that section

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[1973] We note that section 271(c)(2)(B)(ii)'s requirement that BOCs provide nondiscriminatory access to network elements is referred to herein as checklist item 2.

[1974] *UNE Remand Order*, 15 FCC Rcd at 3906, para. 473, *see also Triennial Review NPRM*, 16 FCC Rcd at 22814, para. 72.

[1975] *Triennial Review NPRM*, 16 FCC Rcd at 22814, para. 72; *see also Bell Atlantic New York 271 Order*, 15 FCC Rcd at 4126-27, para. 340.

[1976] Verizon Comments at 66-67. Verizon argues, in the alternative, that the Commission should forbear from applying checklist items (4) through (6) and (10) "once the corresponding elements no longer need to be unbundled under section 251(d)(2)." Verizon Petition for Forbearance of the Verizon Telephone Companies Pursuant to Section 160(c), CC

271 requires BOCs to provide access to loops, switching, transport, and signaling regardless of impairment under section 251.[1977] Z-Tel further argues that competitors are entitled to access to loops, switching, transport, and signaling at TELRIC rates, even if the Commission were to remove these items from the list of UNEs under section 251.[1978] For the reasons outlined below, we reaffirm that BOCs have an independent obligation, under section 271(c)(2)(B), to provide access to certain network elements that are no longer subject to unbundling under section 251, and to do so at just and reasonable rates.

2. Discussion

653. *Independent Access Obligation.* For reasons set forth below, we continue to believe that the requirements of section 271(c)(2)(B) establish an independent obligation for BOCs to provide access to loops, switching, transport, and signaling regardless of any unbundling analysis under section 251.

654. First, the plain language and the structure of section 271(c)(2)(B) establish that BOCs have an independent and ongoing access obligation under section 271. Checklist item 2 requires compliance with the general unbundling obligations of section 251(c)(3) and of section 251(d)(2) which cross-references section 251(c)(3).[1979] Checklist items 4, 5, 6, and 10 separately impose access requirements

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Docket 01-338 at 3 (filed July 29, 2002). We do not address Verizon's forbearance petition in this *Triennial Review* proceeding. Rather, we will address the petition separately consistent with the procedures outlined in section 10 of the Act.

[1977] ALTS *et al.* Comments at 117-18; NuVox *et al.* Comments at 115-16; CompTel Comments at 20; UNE-P Coalition Comments at 17; Z-Tel Comments at 4-15.

[1978] Z-Tel Comments at 7; *see also* UNE-P Coalition Reply at 37 (noting that the "Coalition agrees with Z-Tel . . .").

[1979] *See* 47 U.S.C. § 271(c)(2)(B)(ii).

regarding loop, transport, switching, and signaling,[1980] without mentioning section 251. Had Congress intended to have these later checklist items subject to section 251, it would have explicitly done so as it did in checklist item 2.[1981] Moreover, were we to conclude otherwise, we would necessarily render checklist items 4, 5, 6, and 10 entirely redundant and duplicative of checklist item 2 and thus violate one of the enduring tenets of statutory construction: to give effect, if possible, to every clause and word of a statute.[1982] Verizon asserts that an interpretation of the Act that recognizes the independence of sections 271 and 251(d)(2) places these sections in conflict with each other.[1983] We disagree. Verizon's reading of section 271 would provide no reason for Congress to have enacted items 4, 5, 6, and 10 of the checklist because checklist item 2 would have sufficed.

655. Second, it is reasonable to interpret section 251 and 271 as operating independently. Section 251, by its own terms, applies to *all* incumbent LECs, and section 271 applies only to BOCs, a subset of incumbent LECs.[1984] In fact,

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1980 *See* 47 U.S.C. § 271(c)(2)(B)(iv), (v), (vi), (x).

1981 *Bates v. U.S.*, 522 U.S. 23, 29-30 (1997) (stating that "[w]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.") (internal quotation marks omitted). As such, our decision is entitled to deference because the interpretation involves matters about which the Act is silent. *Chevron*, 467 U.S. at 843.

1982 *See United States v. Menasche*, 348 U.S. 528, 538-39 (1955).

1983 Verizon Comments at 67; Verizon Reply at 54-55.

1984 This fact alone demonstrates that section 271 is not dependent on section 251 because a more limited set of carriers was made subject to the demands of section 271. It is consistent with norms of statutory construction that section 251 as a general statutory provision does not control the more specific section 271. *See Gozlon-Peretz v. United States*, 498 U.S. 395 (1991) (a specific provision controls over one of a more general application).

section 271 places specific requirements on BOCs that were not listed in section 251. These additional requirements reflect Congress' concern, repeatedly recognized by the Commission and courts, with balancing the BOCs' entry into the long distance market with increased presence of competitors in the local market.[1985] Before the 1996 Act's passage, the BOCs, the local progeny of the once-integrated Bell system, were barred by the terms of the MFJ from entering certain lines of business, including providing interLATA services.[1986] The ban on BOC provision of long distance services was based on the MFJ court's determination that such a restriction was "clearly necessary to preserve free competition in the interexchange market."[1987] The protection of the interexchange market is reflected in the fact that section 271 primarily places in each BOC's hands the ability to determine if and when it will enter the long distance market. If the BOC is unwilling to open its local telecommunications markets to competition or apply for relief, the interexchange market remains protected because the BOC will not receive section 271 authorization. The same historical underpinning, however, is not relevant to section 251, which is a mandatory provision designed to ensure a minimum level of openness in the local market. Therefore, we reject Verizon's claim that

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[1985] Section 271 is the direct progeny of the Modification of Final Judgment (MFJ) that contained the terms of the settlement of the Department of Justice's antitrust suit against AT&T. *See United States v. Western Elec. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom., Maryland v. United States,* 460 U.S. 1001 (1983). The MFJ sought to avoid the emergence of an unregulated telecommunications monopoly by imposing specific line-of-business restrictions that explicitly barred the BOCs from providing service for calls that occurred between LATAs. Although the Telecommunications Act of 1996 generally superseded the MFJ, section 271 conditionally continued the interLATA line-of-business restriction in the form of the competitive checklist.

[1986] The MFJ contained the terms of the settlement of the Department of Justice's antitrust suit against AT&T. *See id.*

[1987] *Id.* at 188.

any interpretation of section 271 that recognizes its independence from section 251 would improperly single out BOCs for treatment different from other incumbent LECs.[1988] As explained above, recognizing an independent obligation on BOCs under section 271 would by no means be inconsistent with the structure of the statute. Section 271 was written for the very purpose of establishing specific conditions of entry into the long distance that are unique to the BOCs. As such, BOC obligations under section 271 are not necessarily relieved based on any determination we make under the section 251 unbundling analysis.[1989]

656. *Prices, Terms and Conditions.* It is a different question, however, as to what pricing standard applies to network elements that are unbundled by BOCs solely because of the requirements set forth in section 271. Where there is no impairment under section 251 and a network element is no longer subject to unbundling, we look to section 271 and elsewhere in the Act to determine the proper standard for evaluating the terms, conditions, and pricing under which a BOC must provide the checklist network elements. Contrary to the claims of some commenters, TELRIC pricing for checklist network elements that have been removed from the list of section 251 UNEs is neither mandated by statute nor necessary to protect the public interest. Rather, Congress established a pricing standard under section 252 for network elements unbundled pursuant to section 251 *where impairment is found to exist.* Here, however, we are discussing the appropriate pricing standard for these network elements where there is no impairment. Under the no

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[1988] Verizon Comments at 67; Verizon Reply at 54-55.

[1989] We decline to require BOCs, pursuant to section 271, to combine network elements that no longer are required to be unbundled under section 251. Unlike section 251(c)(3), items 4-6 and 10 of section 271's competitive checklist contain no mention of "combining" and, as noted above, do not refer back to the combination requirement set forth in section 251(c)(3).

impairment scenario, section 271 requires these elements to be unbundled, but not using the statutorily mandated rate under section 252. As set forth below, we find that the appropriate inquiry for network elements required only under section 271 is to assess whether they are priced on a just, reasonable and not unreasonably discriminatory basis—the standards set forth in sections 201 and 202.[1990]

657. By their own terms, neither section 252(d)(1) nor section 271(c)(2)(B) requires that the section 252(d)(1) pricing standard be applied to checklist network elements. Section 252(d)(1) provides the pricing standard "for network elements for purposes of [section 251(c)(3)],"[1991] and does not, by its terms, apply to network elements that are required only under section 271. Indeed, section 252(d)(1) is quite specific that it only applies for the purposes of implementation of section 251(c)(3)—meaning only where there has been a finding of impairment with regard to a given network element. Moreover, as noted above, while checklist item 2 provides that a BOC must provide access to UNEs "in accordance with the requirements of sections 251(c)(3) and 252(d)(1)," the checklist items establishing the specific, separate network element obligations do not contain this language. We disagree with Z-Tel's argument that the cross-reference in checklist item 2 should be read into the later checklist items, and is implicit in them.[1992] Reading this language into these provisions would change their plain meaning, and Z-Tel offers no indication that this is what Congress intended. Moreover, we reject Z-Tel's argument that the cross-references were omitted simply to conserve

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1990 47 U.S.C. §§ 201, 202.

1991 *Id.* § 252(d)(1).

1992 Letter from Christopher J. Wright, Counsel for Z-Tel, to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338 at 11 (filed Dec. 20, 2002) (Z-Tel Dec. 20, 2002 *Ex Parte* Letter).

space or to avoid repetition.[1993] To the contrary, we find Congress' decision to omit cross-references particularly meaningful in this instance: half of the checklist items contain explicit cross-references to other statutory provisions, and it is reasonable to conclude that Congress would have inserted a cross-reference into items 4-6 and 10 had that been its intention.

658. We also decline to use section 271, as suggested by Z-Tel, to broaden the unbundling obligations of section 251. Z-Tel notes that section 251(d)(2) directs the Commission to consider "impair[ment]" "at a minimum" in determining which network elements must be unbundled, and thus argues that the Commission may require unbundling pursuant to section 251 and 252 even in the absence of an impairment finding.[1994] In analyzing section 252(d)(2) the D.C. Circuit in *USTA* determined that the "at a minimum" language potentially could justify the imposition of unbundling obligations under that provision even in the "absence" of impairment.[1995] However, the *USTA* decision contained key limitations to the exercise of such authority. In order to apply the "at a minimum" language in the absence of impairment, the *USTA* court required that the Commission "point to something a bit more concrete than its belief in the beneficence of the widest unbundling possible."[1996] Were we to accept Z-Tel's argument, we would again impose a virtually unlimited standard to unbundling, based on little more than faith that more unbundling is better, regardless of context. Checklist items 4 through 6 and 10 do not require us to impose unbundling pursuant to section 251(d)(2). Rather,

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1993 Z-Tel Dec. 20, 2002 *Ex Parte* Letter at 11.

1994 Z-Tel Comments at 17.

1995 *USTA*, 290 F.3d at 425.

1996 *Id.*

the checklist independently imposes unbundling obligations, but simply does so with less rigid accompanying conditions.

659. In interpreting section 271(c)(2)(B), we are guided by the familiar rule of statutory construction that, where possible, provisions of a statute should be read so as not to create a conflict.[1997] So if, for example, pursuant to section 251, competitive entrants are found not to be "impaired" without access to unbundled switching at TELRIC rates, the question becomes whether BOCs are required to provide unbundled switching at TELRIC rates pursuant to section 271(c)(2)(B)(vi). In order to read the provisions so as not to create a conflict, we conclude that section 271 requires BOCs to provide unbundled access to elements not required to be unbundled under section 251, but does not require TELRIC pricing. This interpretation allows us to reconcile the interrelated terms of the Act so that one provision (section 271) does not gratuitously reimpose the very same requirements that another provision (section 251) has eliminated.

660. We reject arguments by Z-Tel and certain other competitive LECs that the proper way to reconcile any such conflict is to find that our section 251 impairment determinations with respect to unbundled local loops, switching and transport would apply only to non-BOC incumbent LECs.[1998] Z-Tel's argument posits that particular network elements enumerated in the section 271 checklist are the "core" elements, and thus concludes that while the standards in section 251 would still apply to all carriers as to any network elements not mentioned in the checklist, section 271 requirements (as construed by Z-Tel) would supercede section 251 standards as to the most critical network elements delineated by Congress. We think that this reading of the two provisions is illogical. BOCs control 85.9 percent of

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1997 *See Washington Market Co. v. Hoffman,* 101 U.S. 112 (1879).

1998 Z-Tel Comments at 7-8.

incumbent LEC local switched access lines.[1999] Of the remaining lines, 11.6 percent of the lines are served by certain rural telephone companies that section 251(f) expressly exempts from the unbundling obligations set forth in 251(c). So, under the Z-Tel interpretation of sections 251 and 271, Z-Tel would have section 251(c), which is arguably the most important market-opening provision of the Act, apply to a mere 2.5 percent of incumbent LEC lines on the issues and facilities that matter most to local competition.[2000] The section 271 checklist cannot be read to have such a broad effect—while it does set forth particular conditions Congress wished to impose on entry into the in-region interLATA market, Congress could not have intended the checklist to render section 251 itself superfluous.

661. Our recognition that pricing pursuant to section 252 does not apply to network elements that are not required to be unbundled is consistent with the Commission's general approach in the *UNE Remand Order*, and has been applied—apparently with no adverse effect—with respect to access to directory assistance and operator services. The Commission removed directory assistance and operator services from the list of UNEs in the *UNE Remand Order*.[2001] These network elements, like loops, transport, switching and signaling databases, are separately listed in the competitive checklist.[2002] Accordingly, as explained in subsequent section 271 orders, access to directory assistance and operator services remains a condition of long distance entry—but the standard applicable to rates and conditions is not derived from sections 251 and

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[1999] *Federal Universal Service Support Mechanisms Fund Size Projections for the First Quarter 2003*, Submitted by the Universal Service Administrative Company (filed Nov. 1, 2002).

[2000] *Id.*

[2001] *UNE Remand Order*, 15 FCC Rcd at 3891-92, paras. 441-42.

[2002] *See* 47 U.S.C. § 271(c)(2)(B)(vii)(II)-(III).

252.[2003] We note that no party has sought to overturn this aspect of the seventeen section 271 orders that have applied this analysis since directory assistance and operator services were removed from the list of section 251 UNEs, and no party has suggested in this proceeding that the Commission's interpretation of the statute has produced a perverse policy impact with respect to a BOC's provision of these network elements.

662. We note, however, that in the *UNE Remand Order* the Commission stated that "[i]f a checklist network element is unbundled, the applicable prices, terms and conditions are determined in accordance with sections 251 and 252. If a checklist network element does not satisfy the unbundling standards in section 251(d)(2), the applicable prices, terms and conditions for that element are determined in accordance with sections 201(b) and 202(a)."[2004] We reach essentially the same result here, but we clarify our reasoning below.

663. The Supreme Court has held that the last sentence of section 201(b), which authorizes the Commission "to prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act," empowers the Commission to adopt rules that implement the new provisions of the Communications Act that were added by the Telecommunications Act of 1996.[2005] Section 271 is such a provision.[2006] Thus, the pricing of checklist network

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[2003] *See, e.g.*, *SWBT Texas 271 Order*, 15 FCC Rcd at 18527, para. 348.

[2004] *UNE Remand Order*, 15 FCC Rcd at 3905, para. 470.

[2005] *Iowa Utils. Bd.*, 525 U.S. at 377-81.

[2006] The Court found that this grant of authority was "unaffected by" the jurisdictional limitation regarding intrastate matters that was contained in section 2(b) of the 1934 Act. *Id.* at 379. The Court found that since new sections 251 and 252 applied to interstate as well as intrastate matters, section 201(b) authorized the Commission to adopt rules implementing the full scope of those provisions. *Id.* at 379-81.

elements that do not satisfy the unbundling standards in section 251(d)(2) are reviewed utilizing the basic just, reasonable, and nondiscriminatory rate standard of sections 201 and 202 that is fundamental to common carrier regulation that has historically been applied under most federal and state statutes, including (for interstate services) the Communications Act.[2007] Application of the just and reasonable and nondiscriminatory pricing standard of sections 201 and 202 advances Congress's intent that Bell companies provide meaningful access to network elements.

664. Whether a particular checklist element's rate satisfies the just and reasonable pricing standard of section 201 and 202 is a fact-specific inquiry that the Commission will undertake in the context of a BOC's application for section 271 authority or in an enforcement proceeding brought pursuant to section 271(d)(6). We note, however, that for a given purchasing carrier, a BOC might satisfy this standard by demonstrating that the rate for a section 271 network element is at or below the rate at which the BOC offers comparable functions to similarly situated purchasing carriers under its interstate access tariff, to the extent such analogues exist. Alternatively, a BOC might demonstrate that the rate at which it offers a section 271 network element is reasonable by showing that it has entered into arms-length agreements with other, similarly situated purchasing carriers to provide the element at that rate.

665. *Post Entry Requirements.* In the event a BOC has already received section 271 authorization, section 271(d)(6) grants the Commission enforcement authority to ensure that the BOC continues to comply with the market opening requirements of section 271. In particular, this section

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[2007] *See* 47 U.S.C. §§ 201(b), 202(a). Therefore, we reject the argument of Z-Tel that section 252(d)(1) is the only basis for the Commission to evaluate checklist elements not required to be unbundled under section 251.

provides the Commission with enforcement authority where a BOC "has ceased to meet any of the conditions required for such approval."[2008] We conclude that for purposes of section 271(d)(6), BOCs must continue to comply with any conditions required for approval, consistent with changes in the law. While we believe that section 271(d)(6) established an ongoing duty for BOCs to remain in compliance, we do not believe that Congress intended that the "conditions required for such approval" would not change with time. Absent such a reading, the Commission would be in a position where it was imposing different backsliding requirements on BOCs solely based on date of section 271 entry, rather than based on the law as it currently exists. We reject this approach as antithetical to public policy because it would require the enforcement of out-of-date or even vacated rules.

666. Two commenters in this proceeding ask the Commission to adopt special procedural vehicles for re-examining section 271 authorizations, in light of potential rule changes that would change a BOC's obligations under section 251. First, Z-Tel asserts that the Commission must revisit every section 271 authorization to consider "[a]ny significant change to the availability of the UNE platform."[2009] Second, Talk America asks the Commission to adopt a procedure that would freeze in place a BOC's unbundling obligations under section 251, at least pending a review of potential backsliding under section 271(d)(6).[2010] Specifically,

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2008 47 U.S.C. § 271(d)(6).

2009 Z-Tel Comments at 83-84.

2010 Letter from Brad A. Mutschelknaus, Counsel for Talk America and Broadview Networks, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 15 (filed Dec. 6, 2002) (Talk America/Broadview Networks Dec. 6, 2002 *Ex Parte* Letter); *see also* Letter from Brad A. Mutschelknaus, Counsel for Talk America, to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338 at 3 (filed Dec. 30, 2002) (Talk America Dec. 30, 2002 *Ex Parte* Letter).

Talk America contends that, for a BOC that has previously received section 271 authorization, the "anti-backsliding" requirements of section 271(d)(6) would require it to continue providing unbundled local switching (and UNE-P) at TELRIC prices in the event it is no longer required to do so under section 251. Talk America suggests that any rule change that lessens a BOC's obligation to provide access to unbundled switching could decrease the level of facilities-based competition in either residential or business markets, thereby potentially causing a "backsliding" violation under section 271(d)(6) to the extent the BOC relied on UNE-P based competition to support its showing under section 271(c)(1)(A) (Track A). Accordingly, to address this risk of this type of "backsliding," Talk America would require BOCs to file a petition with the Commission—*before* they may be permitted to cease providing switching and UNE-P at TELRIC-based rates—demonstrating the existence of facilities-based competition from carriers that do not rely in any material part on the availability of unbundled local switching or UNE-P at TELRIC-based rates.[2011]

667. We decline to adopt the extraordinary procedural steps requested by Z-Tel and Talk America. With respect to Talk America's proposal, by reexamining whether a BOC continues to qualify for "Track A" *before* conditions change in the market ignores the reality that competitors may take steps to retain customers served by UNE-P. For example, it is entirely possible that a competitive LEC may transition customers from UNE-P to an arrangement using unbundled loops combined with its own switching—thereby retaining the same level of facilities-based competition. Accordingly, the before-the-fact review proposed by Talk America would necessarily require speculation and would hold a BOC to a higher standard than under its initial section 271 application. Finally, there is no suggestion that the procedure proposed by

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[2011] Talk America Dec. 30, 2002 *Ex Parte* Letter at 3.

Talk America is necessary to detect discrimination or bad conduct—indeed, the harm alleged by Talk America would result from a BOC's *compliance with* federal unbundling rules. Accordingly, we do not believe the public interest warrants adoption of this special procedural step. For similar reasons, we decline Z-Tel's request to "revisit" every section 271 authorization to consider changes regarding UNE-P.

B. Clarification of TELRIC Rules

1. Background

668. Section 252(d)(1) of the Act provides that rates for interconnection and unbundled elements shall be "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element" and "may include a reasonable profit."[2012] In the *Local Competition Order*, the Commission adopted guidelines to be applied by state commissions when they are called on to arbitrate disputes regarding the prices for interconnection and UNEs pursuant to section 252(d).[2013] Specifically, the Commission adopted a forward-looking economic cost methodology, which it called "Total Element Long Run Incremental Cost" or "TELRIC." The Supreme Court affirmed the Commission's TELRIC rules in *Verizon v. FCC*.[2014]

669. Based on the Commission's finding that prices in a competitive market will tend towards long-run incremental cost,[2015] the TELRIC methodology is designed to derive prices for particular elements in the incumbent LEC's network that

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2012 47 U.S.C. § 252(d)(1).

2013 *Local Competition Order*, 11 FCC Rcd at 15515, para. 29. The Commission also concluded that rates for reciprocal compensation under section 252(d)(2) should be based on the same principles. *Id.* at 16023, para. 1054.

2014 *Verizon*, 535 U.S. at 467.

2015 *Local Competition Order*, 11 FCC Rcd at 15845, para. 675.

"replicate[], to the extent possible," what the incumbent LEC would be able to charge in a competitive market.[2016] Specifically, TELRIC equates the current market value of the existing network of an incumbent telecommunications provider with the cost the incumbent LEC would incur today if it built a local network that could provide all the services its current network provides, to meet reasonably foreseeable demand, using the least-cost, most-efficient technology currently available.[2017]

670. The Commission's decision to equate the current value of existing equipment with the forward-looking cost of currently available equipment "rests on the rational economic assumption that, as new, more efficient equipment becomes available, the value of older, less efficient equipment will be affected."[2018] TELRIC assumes that the value of an incumbent LEC's network is constrained by the most efficient technology available, even if the incumbent LEC itself does not deploy, or plan to deploy, that technology. In the competitive market assumed under TELRIC, we assume that the most efficient technology currently available will be deployed by at least one carrier, and that the value of all competing networks, and the prices for elements of those

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[2016] *Id.* at 15846, para. 679.

[2017] *Local Competition Order*, 11 FCC Rcd at 15848-49, para. 685; 47 C.F.R. §§ 51.501–51.511. The Commission added one additional constraint on the design of the network: the new network must take as given the existing wire center locations. *Local Competition Order*, 11 FCC Rcd at 15848-49, para. 685.

[2018] *Verizon v. FCC*, Reply Brief for Petitioners United States and FCC at 8 (FCC Reply Brief). As the Supreme Court noted, "what the incumbents call the 'hypothetical' element is simply the element valued in terms of a piece of equipment an incumbent may not own." *Verizon*, 535 U.S. at 501.

networks, will be constrained by the value of the more efficient network.[2019]

671. The TELRIC of a network element is the sum of three components—operating expenses, depreciation expense, and cost of capital.[2020] *Operating expenses* are the annual costs associated with operating a particular asset. Specifically, rates established under TELRIC should reflect the operating expenses associated with a network that uses the most efficient technology currently available.[2021] *Depreciation* is the mechanism by which the investment in an asset is recovered over the life of the asset. In describing the TELRIC methodology, the Commission stated that depreciation expense should be based on "economic depreciation" that "reflects the true changes in economic value of an asset."[2022] *Cost of capital* reflects the rate of rate of return required to attract capital, *i.e.*, the rate of return that investors expect to receive from alternative investments that have the same risk. In the *Local Competition Order*, the Commission stated that regulators should adjust the cost of capital to reflect the risks faced by the incumbent LEC as competition is introduced into its local market.[2023]

672. In paragraph 24 of the *Triennial Review NPRM*, we sought comment on whether, "to encourage investment in new facilities, we might clarify or modify our pricing rules to allow incumbent LECs to recover for any unique costs and risks associated with such investment." In their comments

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2019 Although it is appropriate for a TELRIC analysis to consider existing technology that is not currently deployed by an incumbent LEC, it is not appropriate to consider technologies that may be available in the future but are not currently available.

2020 *Local Competition Order*, 11 FCC Rcd at 15856, para. 703.

2021 *Id.* at 15848-49, para. 685.

2022 *Id.* at 15856, para. 703.

2023 *Id.*

and reply comments, both incumbent LECs and equipment manufacturers argue that a reexamination of TELRIC is necessary because our rules discourage carriers from investing in new facilities.[2024] Competitive LECs generally oppose any modification of our pricing rules on the ground that TELRIC-based rates are fully compensatory and higher rates would create inefficient investment incentives.[2025] Some parties, such as Covad, argue that, if the Commission decides that changes are needed to encourage investment, it is better to modify our pricing rules than to eliminate unbundling requirements.[2026]

673. Subsequently, in a series of *ex parte* letters, a number of incumbent LECs provided a more detailed analysis of their concerns about the effect of TELRIC pricing on their investment incentives.[2027] The incumbent LECs identify five specific aspects of TELRIC that they contend require clarification or modification to ensure that UNE pricing sends correct economic signals: network assumptions, cost of

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[2024] *See, e.g.*, Verizon Comments at 32-33; ACS Comments at 7-8; Alcatel Comments at 24-25.

[2025] *See, e.g.*, WorldCom Comments at 65-70.

[2026] Covad Comments at 63; *see also* Massachusetts Department Comments at 6-7.

[2027] *See* Letter from William P. Barr, Executive Vice President and General Counsel, Verizon, to Michael K. Powell, Chairman, FCC (dated July 16, 2002), *in* Letter from W. Scott Randolph, Director-Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed July 18, 2002) (Verizon July 18, 2002 TELRIC *Ex Parte* Letter); Letter from William M. Daley, President, SBC Communications, to Michael K. Powell, Chairman, FCC (dated Sept. 4, 2002), *in* Letter from Jim Lamoureux, Senior Counsel, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Sept. 9, 2002) (SBC Sept. 9, 2002 TELRIC *Ex Parte* Letter); Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Oct. 28, 2002) (Qwest Oct. 28, 2002 TELRIC *Ex Parte* Letter).

capital, depreciation, fill factors, and NRCs.[2028] Verizon argues that resolution of these issues is necessary so that UNE prices send "the best possible market signals to incumbent LECs, competitive LECs and intermodal competitors, a result that is critical to the continued investment by all competing providers."[2029] Similarly, SBC urges the Commission to "strive to ensure that the regulatory methodology for setting wholesale prices is economically rational and creates the right incentives for incumbent and new entrants alike."[2030] Qwest requests "restoration of TELRIC to its original purpose: the creation of economically appropriate price signals for competitive LECs as they choose between leasing facilities from incumbent LECs and procuring their own."[2031]

674. In response, competitive LECs contend that the TELRIC methodology, properly applied, does send appropriate pricing signals.[2032] AT&T challenges the notion that TELRIC pricing diminishes the investment incentives of

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[2028] Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 2-5; Letter from William M. Daly, President, SBC, to Michael K. Powell, Chairman, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 3 (dated Sept. 4, 2002) (SBC Sept. 9, 2002 TELRIC *Ex Parte* Letter), *in* Letter from Jim Lamoureux, Senior Counsel, SBC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147, 00-218, 00-249, 00-251 (filed Sept. 9, 2002).

[2029] Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 5.

[2030] SBC Sept. 9, 2002 TELRIC *Ex Parte* Letter at 2.

[2031] Qwest Oct. 28, 2002 TELRIC *Ex Parte* Letter, Attach. at 3.

[2032] *See* Letter from James W. Cicconi, General Counsel and Executive Vice President, AT&T, to Michael K. Powell, Chairman, FCC, (dated July 26, 2002), *in* Letter from Joan Marsh, Director-Federal Government Affairs, AT&T, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed July 26, 2002) (AT&T July 26, 2002 TELRIC *Ex Parte* Letter); Letter from Chris Frentrup, Senior Economist, WorldCom, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Oct. 23, 2002) (WorldCom Oct. 23, 2002 TELRIC *Ex Parte* Letter); McLeodUSA Jan. 8, 2003 TELRIC *Ex Parte* Letter.

the incumbent LECs. According to AT&T, "there is no reason why unbundling under the TELRIC standard, properly applied, should lead to underinvestment."[2033] Rather, existing TELRIC rules provide incumbent LECs the opportunity to "establish the UNE rates that are necessary to reflect the particular costs and risks they face."[2034] Similarly, McLeodUSA states that "current TELRIC rules can and do promote investment in the integrated network."[2035]

2. Discussion

675. We conclude that it is necessary to clarify the application of two components of TELRIC that have a major impact on UNE prices—cost of capital and depreciation. These two components of TELRIC are the primary vehicles by which any risks associated with new facilities and new services may be reflected in UNE prices, and therefore it is appropriate to consider these issues in response to the question presented in the *Triennial Review NPRM.* We believe the guidance we provide below is responsive to the concerns raised by the parties and will assist states in their efforts to establish UNE prices that appropriately reflect these risks.

676. In addition to clarification of our rules, some of the incumbent LECs have proposed fundamental changes to the theory underlying the TELRIC rules.[2036] These proposals go

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2033 AT&T July 26, 2002 TELRIC *Ex Parte* Letter at 2.

2034 *Id.*

2035 McLeodUSA Jan. 8, 2003 TELRIC *Ex Parte* Letter at 4.

2036 Verizon, for example, suggests we establish prices based on the costs of its actual network, rather than a hypothetical network. *See* Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 4 ("[T]he Commission should alter its methodology to eliminate the assumption that the existing network is completely 'reconstructed' to reflect a technology mix that goes beyond what likely will ever be in place in any real-world network.").

well beyond the single pricing issue identified in the *Triennial Review NPRM*—whether to modify or clarify our rules to encourage investment in new facilities. We find that the record in this proceeding does not support the type of dramatic changes proposed by the incumbent LECs.[2037] Rather, we find that issues related to modification of our TELRIC pricing framework are best addressed in a future proceeding dedicated to that topic. Accordingly, we will leave the general TELRIC framework intact at this time and consider the need for changes on a more complete record in a future review proceeding.

a. Cost of Capital

677. The cost of capital component of TELRIC is one mechanism by which risk is reflected in UNE prices. In the *Local Competition Order*, the Commission stated that the "currently authorized rate of return at the federal or state level is a reasonable starting point," and that incumbent LECs "bear the burden of demonstrating with specificity that the business risks that they face providing unbundled network elements and interconnection services would justify a different risk-adjusted cost of capital or depreciation rate."[2038] The Commission noted that 11.25 percent was the currently authorized rate of return at the federal level, but held that

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[2037] Both incumbent LECs and competitive LECs have presented some evidence attempting to establish the relationship between UNE prices and investment. *See, e.g.*, Qwest Reply, Attach. *UNE Prices and Telecommunications Investment*; AT&T Oct. 11, 2002 Willig Stimulating Investment; *The Role of Competition in Stimulating Telecommunications Investment*, Hassett and Kotlikoff (dated Oct. 2002), *in* Letter from Kevin A. Hassett, Resident Scholar, The American Enterprise Institute, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Nov. 15, 2002). The only conclusion that we can draw from these studies is that wholesale pricing may be one of the many factors that influence carriers' investment decisions, but that the relative importance of the wholesale pricing regime on investment incentives is uncertain.

[2038] *Local Competition Order*, 11 FCC Rcd at 15856, para. 702.

states may "adjust the cost of capital if a party demonstrates to a state commission that either a higher or lower level of cost of capital is warranted."[2039]

678. Verizon urges the Commission to clarify that, "because TELRIC requires that prices be set based on various competitive assumptions, the cost of capital calculated under TELRIC must reflect the risks associated with those assumptions."[2040] Both Verizon and SBC claim that the risks faced by incumbent LECs today are much greater than they were in 1996 when the Commission stated that 11.25 percent should be used as the starting point in calculating cost of capital.[2041]

679. In response, AT&T states that paragraph 702 of the *Local Competition Order* requires consideration of the *actual* competitive risks an incumbent LEC faces, not the risks it would face in the competitive market that TELRIC assumes.[2042] Specifically, AT&T emphasizes that incumbent LECs have to burden to "demonstrate with specificity" the business risks that "they face" in providing UNEs, not the risks "they might face" if the market were fully

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[2039] *Id.*

[2040] Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 2.

[2041] SBC Sept. 9, 2002 TELRIC *Ex Parte* Letter at 3-4; Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 2.

[2042] AT&T July 26, 2002 TELRIC *Ex Parte* Letter, Attach. at 1. AT&T's position on this issue appears to have evolved over the course of this proceeding. In a subsequent *ex parte* letter, AT&T states that TELRIC compensates incumbent LECs for investing in upgraded facilities, such as fiber loops, because a TELRIC-based price "fully compensates the incumbent for its *prospective risk*." Letter from David Lawson, Counsel for AT&T, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 at 16 (filed Dec. 23, 2002) (emphasis added) (AT&T Dec. 23, 2002 Lawson *Ex Parte* Letter).

competitive.[2043] AT&T also challenges the assertion that an incumbent LEC's UNE business faces risks that are greater than they were in 1996, arguing that even Verizon's own witnesses have conceded in state proceedings that facilities-based competitive LECs are unlikely to make significant inroads in the foreseeable future.[2044]

680. To ensure that UNE prices set by the states appropriately reflect the risks associated with new facilities and new services, we think it would be helpful to clarify two types of risks that should be reflected in the cost of capital. First, we clarify that a TELRIC-based cost of capital should reflect the risks of a competitive market. The objective of TELRIC is to establish a price that replicates the price that would exist in a market in which there is facilities-based competition. In this type of competitive market, all facilities-based carriers would face the risk of losing customers to other facilities-based carriers, and that risk should be reflected in TELRIC prices.

681. We do not agree with AT&T that paragraph 702 of the *Local Competition Order* limits a state to considering only the actual competitive risk the incumbent LEC currently faces in providing UNEs. Because the objective of TELRIC pricing is to replicate pricing in a competitive market,[2045] and prices in a competitive market would reflect the competitive risks associated with participating in such a market, we now clarify that states should establish a cost of capital that reflects the competitive risks associated with participating in the type of market that TELRIC assumes. The Commission specifically recognized that increased competition would lead to increased

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[2043] AT&T July 26, 2002 TELRIC *Ex Parte* Letter, Attach. at 1 (citing *Local Competition Order*, 11 FCC Rcd at 15856, para. 702).

[2044] *Id.*

[2045] *Local Competition Order*, 11 FCC Rcd at 15846, para. 679.

risk, which would warrant an increased cost of capital.[2046] Although paragraph 702 states that there was limited competition for network elements at the time, it is clear from our discussion of the TELRIC methodology that future competition must be considered in assessing risk.[2047]

682. The approach advocated by AT&T and WorldCom does not provide optimal incentives for investment. To calculate rates based on an assumption of a forward-looking network that uses the most efficient technology (*i.e.*, the network that would be deployed in a competitive market), without also compensating for the risks associated with investment in such a network, would reduce artificially the value of the incumbent LEC network and send improper pricing signals to competitors. Establishing UNE prices based on an unreasonably low cost of capital would discourage competitive LECs from investing in their own facilities and thus slow the development of facilities-based competition.

683. Second, we clarify that a TELRIC-based cost of capital should reflect any unique risks (above and beyond the competitive risks discussed above) associated with new services that might be provided over certain types of

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[2046] *Id.* at 15856, para. 702.

[2047] *Id.* at 15848, para. 683 ("Forward-looking cost methodologies, like TELRIC, are intended to consider the costs that a carrier would incur in the future."); *see also id.* at 15854, para. 700 ("The concept of normal profit is embedded in forward-looking costs because the forward-looking cost of capital, *i.e.*, the cost of obtaining debt and equity financing, is one of the forward-looking costs of providing the network elements. This forward-looking cost of capital is equal to a normal profit."). Even if the *Local Competition Order* could be read to suggest that a TELRIC analysis should consider only the current competitive risk faced by an incumbent LEC, we now modify that requirement as described in the text. We think this modification is necessary to send appropriate economic signals as addressed in the next paragraph.

facilities.[2048] In the *Local Competition Order*, the Commission stated that different UNEs may have different costs of capital.[2049] We now clarify that the use of UNE-specific costs of capital is an acceptable method of reflecting in UNE prices any risk associated with new facilities that employ new technology and offer new services. A carrier in a TELRIC proceeding could, for example, attempt to demonstrate that the cost of capital associated with new services that might be provided over mixed copper/fiber loops is higher than the cost of capital used for voice services provided over other UNEs. We think this approach responds to the incumbent LECs' concern that our rules provide no opportunity for them to recover the cost of investing in facilities to provide services that are more advanced than those modeled under TELRIC.[2050]

684. We are not aware of any state proceedings that have considered the use of different costs of capital for different elements. Moreover, the record in this proceeding does not specifically identify or quantify the additional risk that may be associated with investing in facilities to support advanced

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[2048] There seems to be some agreement among the parties on this point. In an *ex parte* filing, AT&T states that "TELRIC-based rates in this context would be calculated by including the potential risk that consumers would not purchase services provided over upgraded facilities." AT&T Dec. 23, 2002 Lawson *Ex Parte* Letter at 16. Similarly, McLeodUSA states that state commissions should "consider whether the risks associated with the equipment providing integrated (including broadband) services warrants an increase in the rate of return used to calculate the TELRIC price." McLeodUSA Jan. 8, 2003 TELRIC *Ex Parte* Letter at 4.

[2049] *Local Competition Order*, 11 FCC Rcd at 15856, para. 702 ("We note that the risk-adjusted cost of capital need not be uniform for all elements.").

[2050] *See, e.g.*, Verizon Oct. 16, 2002 *Ex Parte* Letter at 2 (stating that the current regime "permits telephone companies to earn back their costs (or less under TELRIC) and requires them to bear the full downside risk of investments that fail, while leaving others to capture any upside of investments that succeed.").

services. We cannot tell, therefore, whether the benefits of using multiple costs of capital will in all cases outweigh the possible increased administrative burden associated with establishing multiple costs of capital. Accordingly, we believe parties should continue to have the option to propose (and states should have the option to adopt) a single cost of capital for all UNEs that appropriately reflects the risks associated with competitive markets for the services provided over incumbent LEC networks. We think this approach provides incumbent LECs the opportunity to seek compensation for any additional risks associated with new services and facilities, while preserving flexibility for all parties and for state commissions with respect to implementation of our TELRIC rules.

b. Depreciation

685. Like cost of capital, the depreciation component of TELRIC provides a mechanism by which UNE prices will reflect certain risks associated with new facilities and new services. The *Local Competition Order* contains a very limited discussion of depreciation. Specifically, the Commission stated that properly designed depreciation schedules should take into account expected declines in the value of goods.[2051] Similarly, our rules require the use of "economic depreciation" but provide no additional detail.[2052] There appears to be general agreement among the parties that depreciation should reflect any factors that would cause a decline in asset values, such as competition or advances in technology.[2053]

2051 *Local Competition Order*, 11 FCC Rcd at 15849, para. 686.

2052 47 C.F.R. § 51.505(b)(3).

2053 AT&T, for example, states that "if a competitive environment makes it more likely that an incumbent's capital will be devalued (say by entry or by more rapid technical progress), TELRIC depreciation will reflect this." AT&T Dec. 23, 2002 Lawson *Ex Parte* Letter at 17. This statement appears to be consistent with the basic approach advocated by

686. There are two components of depreciation – the useful life of the asset, and the rate at which the asset is depreciated over the useful life. In their comments, the incumbent LECs address only the issue of asset lives. Verizon requests that, "at an absolute minimum, the Commission should make clear that the starting point should be the same lives that are used for financial reporting purposes in accordance with well-recognized accounting principles."[2054] These lives are "intrinsically forward-looking and are updated frequently to reflect technological and other changes that affect the length of an asset's economic life."[2055] SBC takes a similar approach, noting that Commission action is necessary because "virtually all states applying TELRIC have applied historical, backward-looking legacy regulation depreciation rates devised years ago."[2056] SBC states that these legacy depreciation rates are "inconsistent with real depreciation lives of real telephony assets in the ground, and they are even more inconsistent with the forward-looking TELRIC methodology itself, which assumes, after all, a hypothetical competitor that maintains state-of-the-art equipment."[2057]

687. AT&T and WorldCom respond by arguing that no clarification of TELRIC is necessary. AT&T states that the incumbent LEC position "misrepresents the Commission-prescribed depreciation lives" because "those lives reflect a rigorous application of forward-looking principles."[2058] Depreciation lives based on financial accounting, on the other

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the incumbent LECs. *See, e.g.*, Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 3 (advocating asset lives based on financial reporting because they are "updated frequently to reflect technological and other changes that affect the length of an asset's economic life.").

2054 Verizon July 18, 2002 TELRIC *Ex Parte* Letter at 2-3.

2055 *Id.* at 3.

2056 SBC Sept. 9, 2002 TELRIC *Ex Parte* Letter at 3.

2057 *Id.*

2058 AT&T July 26, 2002 TELRIC *Ex Parte* Letter, Attach. at 2.

hand, are "biased towards the low (shorter) side because they are driven by corporate objectives, including the objective of protecting shareholders."[2059] WorldCom echoes these arguments, and notes that the Commission rejected the use of financial lives, and endorsed the use of Commission-prescribed regulatory lives, for use in the TELRIC model used to calculate universal service support.[2060]

688. We decline to adopt the incumbent LECs' suggestion that we mandate the use of financial lives in establishing depreciation expense under TELRIC. The incumbent LECs have not provided any empirical basis on which we could conclude that financial lives always will be more consistent with TELRIC than regulatory lives. Both financial lives and regulatory lives were developed for purposes other than, or in addition to, reflecting the actual useful life of an asset.[2061] We cannot conclude on this record that one set of lives or the other more closely reflects the actual useful life of an asset that would be anticipated in a competitive market. Accordingly, state commissions continue to have discretion with respect to the asset lives they use in calculating depreciation expense.

[2059] *Id.*

[2060] WorldCom Oct. 23, 2002 TELRIC *Ex Parte* Letter at 3 (citing *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism For High Cost Support For Non-Rural LECs*, CC Docket Nos. 96-45, 97-160, Tenth Report and Order, 14 FCC Rcd 20156, 20344-46, paras. 426-29 (1999)).

[2061] *See 1998 Biennial Regulatory Review—Review of Depreciation Requirements for Incumbent Local Exchange Carriers*, Report and Order in CC Docket No. 98-137 and Memorandum Opinion and Order in ASD 98-91, 15 FCC Rcd 242, 262-63, paras. 48-49 (1999) (noting that Generally Accepted Accounting Principles (GAAP) and other non-FCC regulatory safeguards are intended to protect investor interests, while the Commission's depreciation requirements are intended to protect ratepayer interests).

689. Although we decline to mandate a particular method of deciding the useful life of an asset, we believe that clarification of our rules is necessary with respect to the rate at which an asset is depreciated over its useful life. As noted above, the various components of TELRIC rates should be developed using a consistent set of assumptions about competition. In calculating depreciation expense, therefore, the rate of depreciation over the useful life should reflect the actual decline in value that would be anticipated in the competitive market TELRIC assumes. In this way our "economic depreciation" requirement is designed to replicate the results that would be anticipated in a competitive market.

690. We clarify that under our "economic depreciation" requirement, a carrier may accelerate recovery of the initial capital outlay for an asset over its life to reflect any anticipated decline in its value. For example, an approach that accelerates cost recovery based on an index showing that equipment prices are declining over time may be consistent with our requirement to use economic depreciation. Recovering more of the initial capital outlay for the asset in the early years would enable a carrier to recover less in later years, thereby allowing it to compete with carriers that have purchased new, lower-priced equipment in those later years.

691. To date, state commissions generally have used straight-line depreciation, rather than accelerated depreciation that reflects the anticipated decline in value of assets. Accordingly, the use of accelerated depreciation may raise issues that have not been addressed previously in state proceedings. Among the questions that would have to be addressed by regulators—either the Commission or the states—are how to measure the anticipated decline in value of assets, whether shorter asset lives represent an alternative method of capturing this decline, how UNE prices should be structured to reflect decreases in depreciation expense from one period to the next, and whether levelizing rates across periods, as most cost models do, diminishes, or even

eliminates the intended effect of the acceleration. The record in this proceeding does not provide sufficient information for the Commission to resolve these questions at this time, but we encourage state commissions to consider these issues in future UNE pricing proceedings.[2062]

C. Fresh Look

692. In the *UNE Remand Order*, the Commission declined to grant relief for competitors from liability under contractual early termination clauses in the event that an incumbent LEC's carrier-customer converts a special access circuit to a UNE.[2063] Early termination clauses are provisions that are typically found in fixed term contracts that require payment of a fee if a customer terminates the contract prior to the end of the mutually agreed upon contract term. As a general matter, early termination provisions can be mutually beneficial. Providers are given a measure of certainty because such penalty provisions ensure that costs will be recouped in the event a customer fails to utilize the service for the stipulated period of time. On the other hand, customers enjoy discounted and stable priced services over the life of the contract term.

693. In the *Triennial Review NPRM,* the Commission sought comment on "what bases competitors should be able to obtain a 'fresh look' for long-term commitments."[2064] In response, some competitive LECs have indicated that the Commission should not permit incumbent LECs to impose early termination liabilities on competitive LECs converting from special access to UNEs because the law requires such a result. Notably, they contend that: (1) no "termination"

[2062] As noted above, the Commission plans to commence a proceeding to consider these and other issues related to TELRIC pricing in the near future.

[2063] *UNE Remand Order*, 15 FCC Rcd at 3912, para. 486 n.985.

[2064] *Triennial Review NPRM*, 16 FCC Rcd 22819, para. 83.

occurs because circuits are "converted" to EELs;[2065] (2) the Commission is obligated to correct the results of an erroneous decision by the Eighth Circuit;[2066] and (3) termination penalties constitute "restrictions" on access to UNEs, which is prohibited by section 251.[2067] Competitive LECs also contend that the Commission should exercise its discretion to adopt fresh look because: (1) incumbent LECs exercise market power to force competitive LECs to buy special access facilities which were only affordable with long-term discounts;[2068] and (2) in light of high special access charges and NRCs, termination penalties would be a windfall to incumbent LECs.[2069]

694. Despite these arguments, we will not disturb the Commission's earlier determination related to fresh look for special access to EEL conversions. As indicated below, there is no legal basis that requires the Commission to institute a fresh look policy for EEL conversions. Moreover, we conclude that restructuring these contracts may be unfair to both incumbent LECs and other competitors, disruptive to the

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[2065] *See, e.g.*, Letter from M. Gavin McCarty, Chief Legal Officer, Globalcom, to William Maher, Chief, Wireline Competition Bureau, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1-2 (dated Nov. 11, 2002), *in* Letter from M. Gavin McCarty, Chief Legal Officer, Globalcom, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Nov. 14, 2002) (Globalcom Nov. 14, 2002 *Ex Parte* Letter).

[2066] Globalcom Nov. 14, 2002 *Ex Parte* Letter at 2.

[2067] NuVox *et al.* Comments at 116.

[2068] *See* AT&T Reply at 297; *see also* ALTS *et al.* Comments at 128 (arguing that long-term special access arrangements prevent consumers from obtaining the benefits of competition); NuVox *et al.* Comments at 116-17 (arguing that conversion to UNEs was previously denied by incumbent LECs).

[2069] *See* ALTS *et al.* Comments at 129; *see also* Globalcom Nov. 14, 2002 *Ex Parte* Letter at 2 (arguing that after the termination penalty is assessed the competitive LEC will continue to pay TELRIC compensation).

market place, and ultimately inconsistent with the public interest. While we recognize that fresh look may have been granted in other circumstances, we nevertheless note that the grant of fresh look is a very rare occurrence.

695. As an initial matter, we remain unconvinced by the general argument advanced by several commenters that converting a special access circuit to a UNE does not constitute a termination within the meaning of the termination provisions of incumbent LEC tariffs. Globalcom suggests that such "conversions" do not constitute a termination if the competitive carrier would agree to maintain the UNE loop/transport combination for the remainder of the special access term.[2070] In support of this position, Globalcom noted that the Illinois Commerce Commission determined that termination charges should not apply under Ameritech's intrastate special access tariffs because the termination charges "were not designed for the situation . . . where the provider-customer relationship continues."[2071] Globalcom, however, has not demonstrated that a similar interpretation is required under incumbent LECs' interstate special access tariffs.[2072] In essence, Globalcom claims that no termination has occurred during conversions because the continuation of some other service cancels out the fact that the original service under the tariff will be discontinued.[2073] While we do not foreclose this as a proper reading of a particular tariff

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[2070] Globalcom Nov. 14, 2002 *Ex Parte* Letter at 3.

[2071] Globalcom Nov. 14, 2002 *Ex Parte* Letter at 3 (citing *Globalcom v. Illinois Bell Telephone d/b/a Ameritech Illinois*, ICC Docket 02-0365 (Ill. C.C. Oct. 23, 2002)).

[2072] We note that Globalcom has not provided any specific information (including citations to specific provisions) from its interstate special access contracts.

[2073] *See also* NuVox *et al.* Comments at 116 (arguing that fresh look does not require a carrier to switch to another provider, but "to convert from one type of [incumbent] LEC service to another.").

provision, we also do not find support on this record for the conclusion that this reading necessarily is proper for all tariff provisions.

696. Globalcom also argues that "but for" the protracted litigation regarding UNE rules, competitive LECs would not have been forced to order special access circuits and incumbent LECs would not have been able to charge higher special access rates or cost prohibitive termination fees.[2074] Globalcom seeks to have the Commission go back in time to resolve the inequities that it claims resulted from the decision of the Eighth Circuit to vacate sections 51.315(c)-(f) of our rules, which required incumbent LECs to combine elements on behalf of competitive LECs on request.[2075] We decline to engage in such an exercise. We find that doing so would neither be in the public interest nor represent a competitively neutral approach to the rule changes that have affected both incumbent LECs and competitive LECs alike. Indeed, in overturning the Commission's unbundling rules the D.C. Circuit wrote that UNEs had been "available to CLECs in many markets where there is no reasonable basis for thinking that competition is suffering from any impairment . . . ."[2076] In response to this judicial concern, we have revisited our unbundling requirements in this Order. However, we have not sought to establish rules that would retroactively resolve issues related to the issuance of the *UNE Remand Order*. Doing so would require a level of speculation and conjecture that does not forward the public interest. Moreover, to the extent that Globalcom seeks protection from regulatory and judicial uncertainty, it was free to negotiate to include a change of law provision that would have protected it against the Eighth Circuit's ruling.

2074 Globalcom Nov. 14, 2002 *Ex Parte* Letter at 3.

2075 *See Iowa Utils. Bd. v. FCC*, 120 F.3d at 813.

2076 *Id.*

697. NuVox *et al.* contends that the Commission is legally required to institute a fresh look policy, arguing that a denial of fresh look would be inconsistent with section 251, which does not permit the imposition of impediments to or restrictions on access to UNEs.[2077] We disagree with the logic of NuVox. Nothing in section 251 mandates that the Commission deny incumbent LECs termination liability payments to which they are entitled under contracts in the event of an EEL conversion. As noted above, contracts that provide for term pricing and early termination penalties may benefit both parties and thus do not represent the type of impediment or restriction to access that section 251 prohibits. While we agree that incumbent LECs are not permitted to establish unilateral barriers that work to restrict access to UNEs, that is not the case here. The termination penalties were established by a process of bilateral negotiation or arbitration, not fiat.

698. Although we not persuaded that there are any legal requirements mandating that we adopt a fresh look for all special access contracts,[2078] the Commission may, in its discretion, take such action pursuant to its authority under sections 201 through 205 of the Act.[2079] We decline to pursue such a market-disrupting remedy in this instance because there is not sufficient evidence, in this record, of abuse of market power by the incumbent LECs or some other wrong that must be retroactively addressed here.[2080] We note that

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2077 NuVox *et al.* Comments at 116.

2078 Globalcom Nov. 14, 2002 *Ex Parte* Letter at 3.

2079 *See, e.g.*, *Special Access Order*, 7 FCC Rcd at 7463, para. 40.

2080 AT&T and Globalcom contend that long-term special access contracts were signed under the pressure of economic duress in order to provide economically feasible products to their customers. *See* AT&T Reply at 298; Globalcom Nov. 14, 2002 *Ex Parte* Letter at 2. On the record before us, we find insufficient evidence to demonstrate that carriers

linking a price discount to a contractual term is a reasonable, accepted commercial practice, both inside and outside of the telecommunications industry. It is the specific application of such provisions, rather than the very existence, that could offend the Communications Act. Determining whether such provisions were applied unlawfully is a fact-intensive inquiry. In light of the likely marketplace disruption of adopting a fresh look policy along with the lack of specific evidence on the record, we are not convinced that the abrogation of negotiated terms will be in the public interest in this instance. We, nevertheless, caution incumbent LECs that their ability to apply termination penalties is not unfettered. We concur with the conclusion in the *UNE Remand Order* "that any substitution of unbundled network elements for special access would require the requesting carrier to pay any *appropriate* termination penalties required under volume or term contracts."[2081] Thus, to the extent a carrier can provide more specific evidence that incumbent LEC termination penalties are inappropriate, we will resolve such a matter through an enforcement proceeding.

699. Finally, although competitive carriers contend that incumbent LECs will receive a windfall in the absence of fresh look,[2082] we conclude that the inverse may be true as well. Competitive LECs that entered into long-term special access contracts benefited from term discount arrangements which allowed for lower costs. It may be unfair for these carriers to completely avoid costs they knowingly agreed to shoulder. Indeed, it would put them in a far better position than those competitive LECs that chose to avoid early

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seeking long-term special access commitments were suffering under economic duress.

[2081] *UNE Remand Order*, 15 FCC Rcd at 3912, para. 486 n.985 (emphasis added).

[2082] *See, e.g.*, ALTS *et al.* Comments at 129.

termination provisions, and to select shorter contract periods with higher prices.

D. Transition Period

700. We recognize that many of our decisions in this Order will not be self-executing. Indeed, under the statutory construct of the Act, the unbundling provisions of section 251 are implemented to a large extent through interconnection agreements between individual carriers.[2083] The negotiation and arbitration of new agreements, and modification of existing agreements to reflect these new rules, cannot be accomplished overnight. We recognize that many interconnection agreements contain change of law provisions that allow for negotiation and some mechanism to resolve disputes about new agreement language implementing new rules. Although some parties believe that the contract modification process requires Commission intervention in this instance, we believe that individual carriers should be allowed the opportunity to negotiate specific terms and conditions necessary to translate our rules into the commercial environment, and to resolve disputes over any new agreement language arising from differing interpretations of our rules.

701. Thus, to the extent our decision in this Order changes carriers' obligations under section 251, we decline the request of several BOCs that we override the section 252 process and unilaterally change all interconnection agreements to avoid any delay associated with renegotiation of contract provisions.[2084] Permitting voluntary negotiations for binding

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[2083] *See* 47 U.S.C. § 252.

[2084] *See* Letter from Cronan O'Connell, Vice President—Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338 at 10 (filed Nov. 21, 2002) (Qwest Nov. 21, 2002 *Ex Parte* Letter) (arguing that competitive LECs "typically claim that change of law provisions are not self-executing"); *see also* Letter from Michael K. Kellogg, Counsel for SBC, Qwest and BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338 at 3-5 (filed Jan. 21, 2003)

interconnection agreements is the very essence of section 251 and section 252. We do not believe that the lag involved in negotiating and implementing new contract language warrants the extraordinary step of the Commission interfering with the contract process. We also recognize that commenters have argued that a Commission-mandated transition period is needed so carriers have time to adjust their business practices, and to make arrangements to accommodate their customers. Except as expressly provided above in Parts VI.A.4.a.(v).(a) and VI.D.4.c.(iii).(d), we decline to establish such a transition period and find, instead, that contract arrangements should govern. We note, however, that the practical effect of this negotiation of new terms may be that parties are provided a transition period.

702. While we decline to depart from the section 252 process, we believe that additional guidance is needed here to ensure that parties make the necessary changes to their interconnection agreements in response to this Order in a timely manner. We, therefore, provide some guidance below to give individual carrier negotiations a framework that will avoid undue delay or confusion.

703. First, we require incumbent and competitive LECs to use section 252(b) as a default timetable for modification of interconnection agreements that are silent concerning change of law and/or transition timing.[2085] We find that delay in the

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(SBC/Qwest/BellSouth Jan. 21, 2003 *Ex Parte* Letter) (arguing that the Commission may "negate" certain contract terms under the *Mobile-Sierra* doctrine). Competitive LECs, however, have forcefully argued that the *Mobile-Sierra* doctrine does not apply to interconnection agreements that are filed with the states. *See* Letter from Christopher J. Wright, Counsel for Z-Tel, to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338 at 5-9 (filed Jan. 30, 2003); *see also* AT&T Feb. 3, 2003 *Ex Parte* Letter; Letter from Broadview Networks *et al.* to Marlene H. Dortch, Secretary, FCC, CC Docket 01-338 (filed Feb. 3, 2003).

[2085] Section 252(a)(1) states that "[u]pon receiving a request for interconnection, services, or network elements pursuant to section 251, an

implementation of the new rules we adopt in this Order will have an adverse impact on investment and sustainable competition in the telecommunications industry. Therefore, to ensure that there is no undue delay in commencing the renegotiation of interconnection provisions, the effective date of the rules we adopt in this Order shall be deemed the notification or request date for contract amendment negotiations under this default approach. We believe that this requirement will ensure that carriers will begin immediately to negotiate in good faith pursuant to section 251(c)(1) of the Act to modify their interconnection agreements to the extent necessary in view of the rules we adopt today.[2086] Further, under the section 252(b) timetable, where a negotiated agreement cannot be reached, parties would submit their requests for state arbitration as soon as 135 days after the effective date of this Order but no longer than 160 days after

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incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers." If the parties cannot reach agreement, the party requesting interconnection, services, or network elements may petition the relevant state commission to arbitrate the dispute. *See* 47 U.S.C. § 252(b)(1). Such petitions must be submitted between the 135th to the 160th day (inclusive) after the date on which an incumbent LEC received the request for interconnection, services, or network elements. *Id.* The state Commission must resolve the dispute no later than nine months after the date on which the incumbent LEC received the request for interconnection, services, or network elements. *See* 47 U.S.C. § 252(b)(4)(C). Although section 252(a)(1) and section 252(b)(1) refer to requests that are made *to* incumbent LECs, we find that in the interconnection amendment context, either the incumbent or the competitive LEC may make such a request, consistent with the parties' duty to negotiate in good faith pursuant to section 251(c)(1).

[2086] For example, negotiation or modification requests received before the rules become effective would not start the negotiation clock. In addition, a party cannot contend that the negotiation time period did not begin because another party failed to send a request for negotiation because such actions do not constitute the trigger for negotiations. Instead, as indicated above, negotiations will be deemed to commence upon the effective date of this Order.

this Order becomes effective.[2087] In turn, the state commissions would conclude their consideration of such disputes within nine months of the effective date of this Order.[2088] We will rely on state commissions to be vigilant in monitoring compliance with the provisions of sections 251 and 252. Although parties have sought to have the Commission intervene in this process, we believe that the statutory maximum transition period of nine months will ensure an orderly transition to the new rules. We further note that the nine-month period outlined by Congress is reasonably consistent with the transition periods sought by the parties.[2089]

704. Second, we believe that the section 252 process described above provides good guidance even in instances where a change of law provision exists. As under the default process described above, we expect that parties would begin their change of law process promptly. Once a contract change is requested by either party, we expect that negotiations and any timeframe for resolving the dispute would commence immediately. We also find that the section 251(c)(1) duty to negotiate in good faith applies to these contract modification discussions, as they do under the section 252 process. Accordingly, any refusal to negotiate or cooperate with the contractual dispute resolution process, including taking actions that unreasonably delay these processes, could be considered a failure to negotiate in good faith and a violation of section 251(c)(1).[2090] Finally, to the

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[2087] *See* 47 U.S.C. § 252(b)(1).

[2088] *See id.* § 252(b)(4).

[2089] *See, e.g.*, Eschelon Comments at 18-19.

[2090] 47 U.S.C. § 251(c)(1). As we have recognized in the past, a failure to engage in change of law negotiations may constitute a failure to negotiate in good faith under section 251(c)(1). *See Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Order on Reconsideration and Second Further Notice

extent a contractual change of law provision envisions a state role, we believe a state commission should be able to resolve a dispute over contract language at least within the nine-month timeframe envisioned for new contract arbitrations under section 252.

705. Third, we recognize that some BOCs are concerned that the negotiation process may be unnecessarily delayed where a change of law provision provides for interconnection agreement modification pursuant to "legally binding intervening law or final and unappealable [judicial] orders."[2091] In essence, these companies contend that it would be inappropriate to read these provisions as being triggered only after all appeals of this Order become final and unappealable. Instead, the BOCs contend that the only logical reading of such provisions is that such provisions are triggered when the decision of the D.C. Circuit reversing the Commission's prior UNE rules becomes final and nonappealable.[2092] We believe that the BOCs' interpretation of such provisions is reasonable and that either a court or a state commission would agree with such a reading. Indeed, once the *USTA* decision is final and no longer subject to further review, or the new rules adopted in this Order become effective, the legal obligation upon which the existing interconnection agreements are based will no longer exist.[2093] Given that the prior UNE rules have been vacated and replaced today by new rules, we believe that it would be unreasonable and contrary to public policy to preserve our prior rules for months or even years pending any reconsideration or appeal of this Order.

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of Proposed Rulemaking, 15 FCC Rcd 17806, 17825-26, paras. 34-36 (2000).

[2091] SBC/Qwest/BellSouth Jan. 21, 2003 *Ex Parte* Letter at 2.

[2092] *See USTA*, 290 F.3d at 415.

[2093] SBC/Qwest/BellSouth Jan. 21, 2003 *Ex Parte* Letter at 2.

706. Finally, we reiterate that section 251(c) imposes a good faith negotiation requirement that applies to both incumbent LECs and competitive LECs. Based on past history, we understand that parties may disagree significantly on what constitutes a breach of the good faith negotiation requirement. While we realize that whether a carrier violates its section 251(c)(1) is a fact-specific inquiry, we nevertheless admonish all parties to avoid gamesmanship and behavior that may reasonably lead to a finding of bad faith. For example, parties may not refuse to negotiate any subset of the rules we adopt herein. Once the rules established herein are effective, and any applicable change of law process has been triggered, a party's refusal to negotiate (or actions that would otherwise delay unnecessarily the resolution of) any single issue may be deemed a violation of section 251(c)(1).

E. Periodic Review of National Unbundling Rules

1. Background

707. Our decisions in this Order regarding the network elements that should be unbundled are consistent with the determination in the *UNE Remand Order* that rapid changes in technology, competition, and the economic conditions of the telecommunications market would require amendments to the list of UNEs that meet the standards of section 251(d)(2).[2094] To ensure that the list of UNEs is current and responsive to market and economic realities, the Commission further determined in the *UNE Remand Order* that it would periodically review its rules in this area.[2095]

708. At the time of the *UNE Remand Order*, three years had passed since the Commission first adopted unbundling requirements and considerable market changes had taken place that required the Commission to reassess the availability

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2094 *UNE Remand Order*, 15 FCC Rcd at 3765, paras. 148-49.

2095 *Id.* at 3765, para. 148.

of elements outside the incumbent LECs' networks.[2096] While a constantly evolving marketplace makes such review necessary, the Commission wisely concluded that modifications to the list must be done systematically: "[e]ntertaining, on an *ad hoc* basis, numerous petitions to remove elements from the list, either generally or in particular circumstances, would threaten the certainty that we believe is necessary to bring rapid competition to the greatest number of consumers."[2097] In order to provide market certainty, the Commission declined to adopt an automatic sunset mechanism for removing unbundling obligations and instead chose a three-year review period.[2098]

709. In the *Triennial Review NPRM*, the Commission sought comment on whether the Commission should continue with a fixed-period review process that bars the filing of petitions to remove unbundling obligations between cycles, and whether the Commission should adopt a sunset approach to removing unbundling obligations.[2099] In particular, the Commission sought comment on whether a sunset period for remaining unbundling obligations could create incentives for facilities deployment and investment.[2100] The Commission also invited parties to provide guiding principles that should be employed to determine whether and how existing unbundling rules should be modified on an ongoing basis.[2101] To the extent a periodic review period is retained the Commission also sought comment on whether three years is

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2096 *Id.* at 3765, para. 149. The Commission explained that even as early as 1999, there was evidence that competition was developing in some geographic markets for certain customer groups.

2097 *Id.* at 3765-66, para. 150.

2098 *Id.* at 3766, para. 151.

2099 *Triennial Review NPRM*, 16 FCC Rcd at 22817-18, para. 80.

2100 *Id.*

2101 *Id.*

the appropriate length for the review cycle in light of competitors' experiences with network design, ability to attract investment, and execution of their business strategies.[2102] The *Triennial Review NPRM* also sought comment on whether triennial UNE review was consistent with the requirement of section 11 of the Act to review in even-numbered years whether regulations in effect continue to serve the public interest.[2103]

2. Discussion

710. We conclude that a commitment to a further *de novo* triennial review is not necessary at this time. Rather, as the Commission does with all of its other rules, we will rely on the biennial review mechanism established in section 11 of the Act.[2104] This is not *de novo* review. Instead, consistent with its biennial review procedures, the Commission's review will be limited to assessing whether documented market changes merit modifications in our rules. We conclude that reopening every issue on a biennial basis is not in the public interest because it would increase regulatory uncertainty unnecessarily in this area. We also note that in the period between biennial reviews, it will be the policy of this Commission not to entertain *ad hoc* motions or petitions to remove or add UNEs, and we will summarily dismiss such petitions to ensure certainty in the marketplace.

711. We specifically decline the suggestion of BellSouth and Verizon to adopt a sunset period for our UNE rules.[2105] Verizon argues that the Commission must set a firm sunset

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2102 *Id.* at 22818, para. 81.

2103 *Id.* ("Although our completion of the instant review in 2002 satisfies both review cycles, we seek comment on whether the Commission could wait until 2005 for a subsequent UNE review, or whether section 11 requires a UNE review in 2004.").

2104 47 U.S.C. § 161.

2105 BellSouth Comments at 66, 72; Verizon Reply at 62-63.

date no longer than three years for the elimination of all remaining UNEs to ensure that competitive LECs make prudent investments and to minimize obstacles to investment by the incumbent LECs.[2106] Several commenters oppose a sunset period for UNEs as unnecessary and inconsistent with key goals of the Act.[2107] We agree. We find that, considering the complexity of the analysis required to apply the impairment standard, a sunset provision would be arbitrary, would risk premature withdrawal of UNEs, and would be likely to undercut incumbent LEC incentives to comply as the sunset date approaches.[2108] Moreover, the adoption of a sunset provision is inconsistent with the requirements of the Act. Sections 251(c) and (d) require the Commission to use objective criteria to determine impairment.[2109] Notably, section 251(d) sets out the necessary and impair standard as the statutory floor for the Commission's UNE review.[2110] Thus, under the Act, UNEs remain so long as impairment remains. The mere passage of time cannot replace this statutory mandate.[2111]

[2106] Verizon Reply at 60-61.

[2107] ASCENT Comments at 50; CompTel Comments at 87; ALTS *et al.* Comments at 124; WorldCom Comments at 64-65; Eschelon Comments at 17-18; LDMI Comments at 13.

[2108] ALTS *et al.* Comments at 124; ASCENT Comments at 50; CompTel Comments at 87; Eschelon Comments at 17-18; WorldCom Comments at 64-65.

[2109] 47 U.S.C. §§ 251(c), 251(d).

[2110] "In determining what network elements should be made available for purposes of subsection (c)(3), the Commission should consider *at a minimum*, whether—(A) access to such network elements as are proprietary in nature is necessary; and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer." 47 U.S.C. § 251(d)(2) (emphasis added).

[2111] Eschelon Comments at 17-18.

F. Duty to Negotiate in Good Faith

712. We amend our duty-to-negotiate rule 51.301(c)(8)(ii) to make the rule conform to the text of the *Local Competition Order*. In that order the Commission stated a new entrant could reasonably withhold information about its own costs because the negotiations concern unbundling or leasing of the incumbent LECs' networks, not the new entrants' networks. Rule 51.301(c)(8)(ii) states that refusal by a requesting telecommunications carrier to furnish cost data that would be relevant to setting rates if the parties were in arbitration is among the actions or practices that violate the duty to negotiate in good faith.[2112] The text of the *Local Competition Order*, by contrast, states that it would *not* be unreasonable for a new entrant to withhold information about its own costs because the negotiations do not concern unbundling or leasing the new entrants' networks.[2113] We therefore amend rule 51.301(c)(8)(ii) to correct this typographical error and replace the word "requesting telecommunications carrier" with "incumbent LEC."

IX. FURTHER NOTICE OF PROPOSED RULE-MAKING

713. In this proceeding and in comments filed in response to a related Petition for Forbearance and Rulemaking filed by Mpower Communications (Mpower May 25, 2001

[2112] 47 C.F.R. § 51.301(c)(8)(ii). The rule 51.301 states in relevant part that: "(c) If proven to the Commission, an appropriate state commission, or a court of competent jurisdiction, the following actions or practices, among others, violate the duty to negotiate in good faith: . . . (8) Refusing to provide information necessary to reach agreement. Such refusal includes, but is not limited to: . . . (ii) Refusal by a requesting telecommunications carrier to furnish cost data that would be relevant to setting rates if the parties were in arbitration."

[2113] *Local Competition Order*, 11 FCC Rcd at 15577-78, para. 155 (emphasis added).

Petition),[2114] several parties have argued that the Commission should reconsider its current rules implementing section 252(i) (*i.e.*, "pick-and-choose rule"), under which requesting carriers are permitted to opt into individual portions of interconnection agreements without accepting all the terms and conditions of such agreements.[2115] In the view of Mpower, a competitive LEC, and several incumbent LECs, this regime has impeded the type of marketplace negotiations that Congress intended to make a centerpiece of the transition from regulated monopolies to competition. In this section, we seek comment on whether the Commission should alter its interpretation of section 252(i) to promote more meaningful commercial negotiations. We tentatively conclude that a modified approach would better serve the goals embodied in section 252(i) and sections 251-252 generally. As discussed more fully below, once an incumbent LEC obtains state approval of a statement of generally available terms and conditions (SGAT) pursuant to section 252(f)—which essentially functions as a standardized interconnection agreement—the incumbent LEC and competitive carriers then would be permitted to negotiate alternative agreements that third parties could opt into only in their entirety or not at all.

714. We hereby incorporate the Mpower May 25, 2001 Petition and the comments and *ex parte* presentations in CC Docket No. 01-117 into this docket. Commenters need not resubmit material previously filed in these proceedings.

A. Background

715. Section 252(i) of the Act provides that a "local exchange carrier shall make available any interconnection, service or network element provided under an agreement

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[2114] Mpower Communications Corp. Petition for Forbearance and Rulemaking, CC Docket No. 01-117 (filed May 25, 2001) (Mpower May 25, 2001 Petition).

[2115] 47 C.F.R. §§ 51.809(a)-(c).

approved under [Section 252] to which it is a party to any other requesting carrier upon the same terms and conditions as those provided in the agreement."[2116] When the Commission initially sought comment on the appropriate interpretation of section 252(i), competitive LECs generally argued that they should be entitled to opt into each distinct term and condition in an interconnection agreement approved pursuant to section 252.[2117] Incumbent LECs, by contrast, argued that such an approach would deter meaningful negotiations, because an incumbent LEC would be reluctant to make any significant concession (in exchange for some benefit) for fear that the concession would, without all of the bargained-for considerations, become available to every potential entrant in the market.[2118] In the *Local Competition Order*, the Commission adopted the interpretation advanced by competitive carriers, finding that "incumbent LECs must permit third parties to obtain access under section 252(i) to any *individual* interconnection, service or network element arrangement on the same terms and conditions as those contained in any agreement approved under section 252."[2119] This decision has allowed competitive carriers to "pick and choose" any provision in an approved interconnection agreement between another competitor and the incumbent LEC.

716. On review, the U.S. Court of Appeals for the Eighth Circuit vacated the pick-and-choose rule, holding that it would unreasonably deter voluntarily negotiated agreements "by making incumbent LECs reluctant to grant quids for quos, so to speak, for fear that they would have to grant others

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[2116] 47 U.S.C. § 252(i).

[2117] *Local Competition Order*, 11 FCC Rcd at 16135-36, paras. 1304-05.

[2118] *Id.* at 16134, para. 1303.

[2119] *Id.* at 16139, para. 1314 (emphasis added); *see also* 47 C.F.R. § 51.809.

the same quids without receiving quos."[2120] The Supreme Court reversed the Eighth Circuit and reinstated the rule. The Court agreed with the incumbent LECs that it would be "eminently fair" if "[a] carrier who wants one term from an existing agreement . . . [were] required to accept *all* the terms in the agreement."[2121] The Court held, however, that the Commission's interpretation of section 252(i) was reasonable (and indeed the "most readily apparent" reading of section 252(i)), because it closely tracked the statutory text.[2122] Ultimately, the Court concluded that the question of "whether the Commission's approach will significantly impede negotiations (by making it impossible for favorable interconnection- service or network-element terms to be traded off against unrelated provisions) is a matter eminently within the expertise of the Commission and eminently beyond our ken."[2123]

717. In its petition, Mpower Communications, a competitive LEC, seeks relief from the pick-and-choose requirement, arguing that the rule "inhibit[s] innovative deal-making."[2124] Mpower observes that the existing rule has produced "a great sameness and very little meaningful choice."[2125] In an effort to "'add an arrow to the quiver' of ILECs and CLECs who want to make competition work,"[2126] Mpower proposes authorizing "FLEX contracts" as an alternative to the pick-and-choose regime. A FLEX contract would be a voluntarily negotiated wholesale agreement

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2120 *Iowa Utils. Bd.*, 525 U.S. at 377 (citing *Iowa Utils. Bd. v. FCC*, 120 F.3d at 801).

2121 *Id.* at 395-96.

2122 *Id.* at 396.

2123 *Id.*

2124 Mpower May 25, 2001 Petition at 9.

2125 *Id.*

2126 *Id.* at 4.

between an incumbent LEC and a competitive LEC that other carriers could opt into only as a "package deal"—that is, they would be required to accept the entire agreement "rather than be able to pick just 'the best parts' of the deal."[2127] To accomplish this goal, Mpower argues that the Commission should forbear from section 252(i), as well as from the requirement in section 252(e) to submit interconnection agreements for state commission approval.[2128] Only the Commission would be permitted to enforce the terms of FLEX contracts, and such terms would not be admissible in any "unrelated proceeding."[2129] Creating this safe harbor from the pick-and-choose rule, Mpower argues, would pave the way toward improved wholesale relationships between incumbent LECs and competitive carriers.[2130]

718. Several parties filed comments in response to the Mpower May 25, 2001 Petition. Incumbent LECs support the Petition, arguing that the pick-and-choose rule undermines the regime of commercial negotiations envisioned by Congress.[2131] Commenters opposing the Mpower May 25, 2001 Petition object to circumventing the requirement of state commission approval of interconnection agreements, arguing that the forbearance standard is not satisfied.[2132] These commenters also express the concern that requiring competitors to opt into an entire FLEX contract would enable

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[2127] *Id.* at 8.

[2128] *Id.* at 14-15.

[2129] *Id.* at 16.

[2130] *Id.* at 17.

[2131] *See, e.g.*, Verizon Comments on Mpower May 25, 2001 Petition at 2; BellSouth Comments on Mpower May 25, 2001 Petition at 2; Qwest Comments on Mpower May 25, 2001 Petition at 1.

[2132] *See, e.g.*, AT&T Comments on Mpower May 25, 2001 Petition at 3-4; Focal Comments on Mpower May 25, 2001 Petition at 5-6; Sprint Comments on Mpower May 25, 2001 Petition at 3; ASCENT Comments on Mpower May 25, 2001 Petition at 8.

incumbent LECs to create "poison pills"—"provisions that do not negatively affect the contracting parties but that would make the contract unpalatable to other carriers."[2133]

719. In a January 17, 2003 *ex parte* letter, Verizon, joined by BellSouth, SBC and Qwest, press for the abandonment of the pick-and-choose rule, arguing that it permits a competitive LEC "to cherry-pick individual provisions of any approved interconnection agreement previously negotiated under § 252 between an [ILEC] and another CLEC, without any obligation to accept the remaining provisions of the agreement."[2134] These carriers contend that "[e]liminating the pick-and-choose rule entirely, not merely for Mpower's proposed flexible contract mechanism, would encourage mutually beneficial business relationships between ILECs and CLECs, as opposed to the adversarial, regulation-based relationships that are more typical today."[2135]

B. Request for Comment

720. We seek comment on whether the Commission should eliminate the pick-and-choose rule and substitute an alternative interpretation of section 252(i). We agree with commenters that, as the Commission implements a granular analysis under which some network elements will no longer be available on an unbundled basis in all markets, it will be especially important for the Commission "to provide market-based incentives for incumbents and CLECs to negotiate innovative commercial alternatives to the UNE platform"[2136] and other network elements and interconnection arrangements.

2133 AT&T Comments on Mpower May 25, 2001 Petition at 3.

2134 *See* Verizon Jan. 17, 2003 *Ex Parte* Letter at 1.

2135 Verizon Jan. 17, 2003 *Ex Parte* Letter at 3.

2136 *Id.* at 2.

721. As an initial matter, we seek comment on the Commission's legal authority to alter its interpretation of the statute. As the Supreme Court observed, the pick-and-choose rule "tracks the pertinent language almost exactly" and is the "most readily apparent" reading of the statute.[2137] The Court also stated, however, that judging whether the pick-and-choose rule "will significantly impede negotiations (by making it impossible for favorable interconnection-service or network-element terms to be traded off against unrelated provisions) is a matter eminently within the expertise of the Commission and eminently beyond our ken."[2138] Reading these statements together, we tentatively conclude that the Commission may adopt a different rule pursuant to section 252(i), provided the Commission's modified rule remains a reasonable interpretation of the statutory text.[2139] We seek comment on this analysis.

722. We next seek comment on the extent to which the pick-and-choose rule impedes meaningful negotiations. Mpower contends that, "[f]rom the standpoint of innovative and effective contracting," negotiations under the pick-and-choose regime are "reminiscent of the Gobi Desert."[2140] Incumbent LECs generally echo this sentiment, stating that "the pick-and-choose rule has produced one-size-fits-all agreements that function much like generally applicable tariffs."[2141] We tentatively conclude based on our experience

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2137 *Iowa Utils. Bd.*, 525 U.S. at 396.

2138 *Id.*

2139 *See* Verizon Jan. 17, 2003 *Ex Parte* Letter at 4 (citing *Clinchfield Coal Co. v. Federal Mine Safety & Health Review Comm'n*, 895 F.2d 773, 777-78 (D.C. Cir. 1990) (holding that agency may replace previously affirmed reasonable interpretation of statute with a different reasonable interpretation, even if a reviewing court assumes that the previous view "was the better one.").

2140 Mpower May 25, 2001 Petition at 9.

2141 Verizon Jan. 17, 2003 *Ex Parte* Letter at 3.

since 1996 that Mpower and other commenters are correct that the pick-and-choose rule discourages the sort of give-and-take negotiations that Congress envisioned. The record produced in response to the Mpower May 25, 2001 Petition indicates that incumbent LECs seldom make significant concessions in return for some trade-off for fear that third parties will obtain the equivalent benefits without making any trade-off at all.[2142] Parties that disagree with this assessment should provide concrete evidence that meaningful negotiations in fact occur under the pick-and-choose rule.

723. Competitive carriers identify two primary concerns with Mpower's proposal to allow voluntary FLEX contracts as an alternative to the existing pick-and-choose process—concerns that would apply equally to any proposal to replace the existing rule with a requirement to opt into entire agreements as package deals. First, commenters argue that if competitive carriers were required to opt into an entire agreement rather than individual provisions, incumbent LECs would insert "poison pills" into agreements to make them unsuitable for adoption by third parties.[2143] The Commission credited this argument in the *Local Competition Order*, where it observed that "failure to make provisions available on an unbundled basis could encourage an incumbent LEC to insert into its agreement onerous terms for a service or element that the original carrier does not need, in order to discourage subsequent carriers from making a request under that agreement."[2144] The Commission accordingly opined that "requiring requesting carriers to elect an entire agreement would appear to eviscerate the obligation Congress imposed

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[2142] *See, e.g.*, Verizon Comments on Mpower May 25, 2001 Petition at 2; Qwest Comments on Mpower May 25, 2001 Petition at 1-2; BellSouth Comments on Mpower May 25, 2001 Petition at 2-3; USTA Reply on Mpower May 25, 2001 Petition at 3-4.

[2143] *See, e.g.*, AT&T Reply on Mpower May 25, 2001 Petition at 3.

[2144] *Local Competition Order*, 11 FCC Rcd at 16138, para. 1312.

in section 252(i)."[2145] Second, in response to Mpower's suggestion that FLEX contracts exist alongside the pick-and-choose rule, commenters argue that there is no valid basis for exempting carriers from the requirement to submit interconnection agreements for state commission approval or from other requirements in section 252.[2146]

724. We believe that the concerns expressed in the *Local Competition Order* remain valid, but, in light of the shortcomings of the pick-and-choose regime, we seek comment on whether an alternative interpretation of section 252(i) could restore incentives to engage in give-and-take negotiations while maintaining effective safeguards against discrimination. We ask commenters to address whether concerns expressed previously by the Commission about "poison pills" and other types of discrimination could be addressed through narrower means than the current pick-and-choose rule. We also seek comment on whether any new rule adopted pursuant to an alternative interpretation of section 252(i) should be applied to all existing approved interconnection agreements or only those interconnection agreements approved prior to the adoption of such new rule.

725. We seek comment on the following proposal and whether it would address the criticisms of the current pick-and-choose rule without undermining competitors' rights under the Act. If incumbent LECs do not file and obtain state approval for a SGAT, the current pick-and-choose rule would continue to apply to all approved interconnection agreements between the incumbent LEC and other carriers. If incumbent LECs do file and obtain state approval for a SGAT, however, the current pick-and-choose rule would apply solely to the SGAT, and all other approved interconnection agreements would be subject to an "all-or-nothing" rule requiring carriers

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[2145] *Id.*

[2146] *See, e.g.*, WorldCom Comments on Mpower May 25, 2001 Petition at 5-6.

to adopt the interconnection agreement in its entirety.[2147] The SGAT condition would guarantee competitors access to a minimum set of terms and conditions for interconnection and access to UNEs or resale (or services provided pursuant to section 251). Once the incumbent LEC met the SGAT condition, the incumbent LEC would be free to negotiate more customized agreements with the knowledge that third parties would be limited to opting into the entirety of such agreements, rather than taking individual terms without making any trade-offs.[2148]

726. We note that such an approach, unlike Mpower's FLEX contract proposal, would leave in place all of the safeguards in sections 251 and 252. The Commission would not exercise any forbearance authority. Rather, the Commission would reinterpret section 252(i) to limit carriers' opt-in rights to the entire agreement, subject to the SGAT condition. Importantly, states would be able to draw on their considerable expertise in deciding whether to approve an SGAT. Moreover, any "customized" agreement entered into, subsequent to the satisfaction of the SGAT requirement, would continue to be subject to the duty of good faith negotiation in section 251(c)(1), as well as the state approval requirement in section 252(e). Incumbent LECs also would

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[2147] As discussed below in paragraph 727, we acknowledge that only BOCs are subject to § 252(f) and seek comment on whether we can provide alternate means for non-BOC incumbent LECs to meet our proposed SGAT condition.

[2148] If the Commission were to adopt such a rule change, state commissions could not prevent its implementation by rejecting a proposed interconnection agreement on the ground that it is available to competitors only on a package-deal basis. Rather, the state commission could reject a customized agreement as discriminatory only if the commission found that the parties intended to discriminate against other carriers. The fact that a third party might be unable to opt into the agreement as a practical matter would not constitute unreasonable discrimination in light of the availability of interconnection, UNEs, and services under the state-approved SGAT.

remain subject to the nondiscrimination provisions and other safeguards in sections 201 and 202 of the Act.

727. We seek comment on the reasonableness of interpreting section 252(i) to allow carriers to opt into entire agreements, but not individual provisions, subject to satisfaction of the above described SGAT condition. We recognize that section 252(f) refers only to BOCs, rather than to incumbent LECs generally. We seek comment on whether conditioning a departure from the pick-and-choose rule on approval of an SGAT—but not otherwise making non-BOC incumbent LECs subject to section 252(f)—would be consistent with the statute.[2149] We also seek comment on whether this conditional approach would adequately address the shortcomings in the existing pick-and-choose rule. Moreover, would such an approach adequately protect competitors from discrimination and other anti-competitive effects? Would the SGAT condition, together with the preservation of the good-faith obligation and nondiscrimination safeguards, be sufficient to prevent the more limited approach to opt-in rights from "eviscerat[ing] the obligation Congress imposed in section 252(i)"?[2150] We seek comment on whether the proposal described above would be workable for all classes of carriers, including smaller competitive LECs that lack the resources of larger competitors. We ask

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[2149] Although § 252(f) applies specifically only to BOCs, in order to provide the same opportunity to non-BOC incumbent LECs to enter into customized agreements, we would allow non-BOC incumbent LECs to file a single interconnection agreement for state approval and designate it as an SGAT-equivalent that is subject to the current pick-and-choose rule. Because non-BOC incumbent LECs already file multiple interconnection agreements for state approval under the current pick-and-choose rule, this requirement would not impose any new requirements on non-BOC incumbent LECs, but rather provide them with the same opportunity we propose to provide BOCs to adopt more customized interconnection agreements with third parties.

[2150] *Local Competition Order*, 11 FCC Rcd at 16138, para. 1312.

commenters to describe any relevant experience requesting or provisioning network elements and services out of SGATs.

728. We tentatively conclude that limiting carriers' opt-in rights to entire agreements (subject to satisfaction of the SGAT condition) would be consistent with the text of section 252(i), which requires only that an incumbent LEC "make available any interconnection, service, or network element provided under an agreement approved under [section 252] to which it is a party to any other requesting telecommunications carrier *upon the same terms and conditions* as those provided in the agreement."[2151] We note that the ambiguous nature of this italicized phrase prompted the Supreme Court to conclude that the appropriate interpretation of section 252(i) is "eminently within the Commission's expertise."[2152] Our view on the reasonableness of the interpretation proposed above is strongly influenced by our tentative judgment that conditioning relief from the pick-and-choose rule on an SGAT requirement would strike an appropriate balance among the competing policy interests at stake. We seek comment on these tentative conclusions.

729. Finally, we seek comment on other means of restoring the congressional goal of meaningful marketplace negotiations. Are there modifications to the approach described above that would better serve the statutory goals? Would a different approach be preferable? We ask commenters to describe in detail any proposal and explain how the proposal (a) would restore market-based incentives to negotiate, and (b) protect competitors from discrimination.

2151 47 U.S.C. § 252(i) (emphasis added).

2152 *Iowa Utils. Bd.*, 525 U.S. at 396.

X. PROCEDURAL ISSUES

A. Final Regulatory Flexibility Analysis

730. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[2153] an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Federal Register summary of the *Triennial Review NPRM*.[2154] The Commission sought written public comments on the proposals in the *Triennial Review NPRM*, including comments on the IRFA. Comments addressed the proposals contained in the *Triennial Review NPRM*, as well as the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) addresses comments on the IRFA and conforms to the RFA.[2155]

1. Need for, and Objectives of, the Rules

731. This Order fulfills the commitment the Commission undertook in its 1999 *UNE Remand Order* to reexamine, in three years, the list of network elements that incumbent LECs must offer to competitors on an unbundled basis, and responds to several significant judicial rulings that have been issued since the Commission last conducted a comprehensive review of its unbundling rules.[2156] More specifically, this Order refines the "impair" standard set forth in section 251(d)(2) of the Act, and applies the revised standard to an array of "transmission" and "intelligence" network elements. The revised "impair" standard is designed to reflect both the experience of the local service market during the seven years

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[2153] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2154] 67 Fed. Reg. 1947 (Jan. 15, 2002).

[2155] *See* 5 U.S.C. § 604.

[2156] *See, e.g., Verizon*, 535 U.S. 467; *CompTel*, 309 F.3d 8; *USTA*, 290 F.3d 415.

since the Act's market-opening provisions took effect and the legal guidance mentioned above. Applying this standard, which pays special attention to the requesting carrier's ability to self-provision the element or to obtain it from a source other than the incumbent LEC, this Order adopts a list of network elements that must be unbundled and sets forth the particular circumstances in which unbundling will be required. The approach adopted is substantially more granular than our earlier formulations of the "impair" standard, accounting for considerations of customer class, geography, and service. This Order also reaffirms a state commission's authority to establish unbundling requirements, as long as the unbundling obligations are consistent with the requirements of section 251(d)(3) and do not substantially prevent implementation of the requirements of that section and the purposes of the Act, and authorizes state commissions to make certain factual determinations necessary to implementation of the granular analysis we adopt here.

2. Summary of Significant Issues Raised by the Public Comments in Response to the IRFA

732. In this section, we respond to various arguments raised by TeleTruth, the National Federation of Independent Businesses (NFIB), and the Office of Advocacy of the Small Business Administration (SBA Advocacy) relating to the IRFA presented in the *Triennial Review NPRM*.[2157] We also address concerns raised by Senator (then-Representative) James Talent in a letter submitted in response to the *UNE Remand Order*, which was later incorporated into this proceeding.[2158] To the extent we received comments raising

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[2157] TeleTruth's reply comments were filed in several separate dockets, and are not specific to the IRFA prepared for this proceeding. *See generally TeleTruth Reply*. Here, we address only those concerns pertinent to this proceeding. We will address TeleTruth's remaining arguments in subsequent Orders, as appropriate.

[2158] *Triennial Review NPRM*, 16 FCC Rcd at 22788, para. 13.

general small business concerns during this proceeding, those comments are discussed throughout the Order and are summarized in Part X.A.5, below.

733. As an initial matter, we reject the contention that the Commission failed to consider the needs of small business customers of competitive LECs in fashioning the analysis set forth in this Order. We have grappled, throughout this proceeding and throughout this Order, with the consequences our determinations will have on all market participants, including small business providers and the small business end users about which TeleTruth, NFIB, SBA Advocacy, and Senator Talent express concern.[2159] We have also considered various alternatives to the rules we adopt, and have stated the reasons for rejecting these alternative rules, as commenters have urged.[2160] A summary of our analysis regarding small business concerns, and of alternative rules that we considered in light of those concerns, is presented in subsection 5 of the FRFA, *infra*.

734. Many of the complaints raised regarding the Commission's IRFA hinge on the argument that in performing the analysis mandated by the RFA, an agency

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[2159] For example, we have considered the argument that new unbundling rules will affect competitive LECs' broadband capabilities, and in turn end users' access to broadband service. *See supra* Part VI.A.4.a; *see also* TeleTruth Reply at 37.

[2160] *See* TeleTruth Reply at 26; Letter from Dan Danner, Senior Vice President—Public Policy, NFIB, to Michael K. Powell, Chairman, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 1 (filed Feb. 5, 2003) (NFIB Feb. 5, 2003 *Ex Parte* Letter); Letter from Thomas M. Sullivan, Chief Counsel for SBA Advocacy, to Michael K. Powell, Chairman, FCC, CC Docket Nos. 01-338, 96-98, 98-147 at 4 (filed Feb. 5, 2003) (SBA Advocacy Feb. 5, 2003 *Ex Parte* Letter); Letter from James M. Talent, Chairman, Committee on Small Business, House of Representatives, to William Kennard, Chairman, FCC, CC Docket No. 96-98 at 2, 3 (filed July 20, 2000) (Talent July 20, 2000 *Ex Parte* Letter); 5 U.S.C. § 604(a)(5).

must analyze the effects its proposed rules will have on "customers" of the entities it regulates.[2161] But as the courts have made clear time and again, this is not the case. Indeed, the D.C. Circuit "has consistently held that the RFA imposes no obligation to conduct a small entity impact analysis of effects on entities which [the agency conducting the analysis] does not regulate."[2162] Thus, we emphasize that the RFA imposes no independent obligation to examine the effects an agency's action will have on the customers of the companies it regulates unless those customers are, themselves, subject to regulation by the agency. In any event, as noted above, we have considered the needs of small business customers of

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[2161] *See, e.g.*, TeleTruth Reply at 15 (asserting that "[t]he [c]ustomer" had been "[t]otally [l]eft [o]ut" of the proceeding and contending that "[f]or the average customer, the [NPRM and other FCC documents] might as well be in Aramaic, or Urdic"), 16 (arguing that the RFA imposes a notice requirement vis-à-vis small businesses that happen to consume telecommunications services), 18 (alleging that the IRFA failed to address "small business . . . customers" of telecommunications providers), 20 ("The FCC has failed to accurately assess the number of small business entities that depend on [small telecommunications competitors], from the small business users to the small business suppliers."), 34-35 (presenting analysis of the number of online customers of ISPs potentially affected by Commission's rulemakings), 43 ("A 'class' of small businesses that is totally missing from [the IRFA] are the small businesses that depends [sic] on . . . ISPs and CLECs [that will be affected by the Commission's ruling]."); *see also* NFIB Feb. 5, 2003 *Ex Parte* Letter at 1 ("[T]he FCC should make certain that it fully considers the direct and indirect impacts of its rulemaking on small-business consumers. We urge the FCC to review all data to ensure that any action taken does not hinder the availability of competition for small businesses needing local telephone services.").

[2162] *Michigan v. EPA*, 213 F.3d 663, 689 (D.C. Cir. 2000) (internal quotation marks omitted); *see also Motor & Equip. Mfrs. Ass'n. v. Nichols*, 142 F.3d 449, 467 (D.C. Cir. 1998); *United Distribution Cos. v. FERC*, 88 F.3d 1105, 1170 (D.C. Cir. 1996); *American Trucking Ass'ns, Inc. v. EPA*, 175 F.3d 1027, 1044, *reh'g granted in part, denied in part* 195 F.3d 4 (D.C. Cir. 1999), *rev'd in part on other grounds*, 531 U.S. 457 (2001).

competitive (and incumbent) LECs throughout this Order. Our analysis of small business concerns is summarized in Part X.A.5, below.

735. TeleTruth argues that the Commission has taken inadequate steps to notify small businesses of this and other proceedings, in violation of the RFA.[2163] We disagree. The RFA requires the Commission to "assure that small entities have been given an opportunity to participate in the rulemaking," and proposes as example five "reasonable techniques" that an agency might employ to do so.[2164] In this proceeding, the Commission has employed several of these techniques: it has published a "notice of proposed rulemaking in publications likely to be obtained by small entities";[2165] has "inclu[ded] . . . a statement that the proposed rule may have a significant economic effect on a substantial number of small entities" in the *Triennial Review NPRM*;[2166] has solicited comments over its computer network;[2167] and has acted "to reduce the cost or complexity of participation in the rulemaking by small entities" by, among other things,

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[2163] *See* TeleTruth Reply at 16-18; Letter from Bruce Kushnick, Chairman, TeleTruth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 at 5 (filed Feb. 5, 2003) (TeleTruth Feb. 5, 2003 *Ex Parte* Letter).

[2164] *See* 5 U.S.C. § 609.

[2165] 5 U.S.C. § 609(a)(2). We disagree with TeleTruth's argument that small companies pertinent to our analysis cannot be expected to learn of actions reported in the Federal Register. *See* TeleTruth Reply at 16. As explained above, the obligations imposed by the RFA relate only to companies regulated by the agency; TeleTruth has provided no reason to believe that small *telecommunications* companies would be unfamiliar with the Federal Register, in which all federal regulations pertinent to those companies' operations are published.

[2166] 5 U.S.C. § 609(a)(1).

[2167] *Id.* § 609(a)(2).

facilitating electronic submission of comments.[2168] We thus conclude that the Commission has satisfied its RFA obligation to assure that small companies were able to participate in this proceeding.

736. TeleTruth further contends that the Commission's IRFA was flawed by its use of "boilerplate" language that differed little from the language used in the IRFAs prepared for other proceedings.[2169] However, the only language it cites does not even appear in the IRFA prepared for this proceeding. Moreover, TeleTruth has suggested no reason why the use of similar language in several proceedings is at all problematic. Indeed, the particular language about which it complains merely describes the "number of telephone companies affected" by a given proceeding—a class that is likely to differ little, if at all, among industry-wide rulemakings such as this.

737. TeleTruth next complains that the IRFA used outdated census data from 1992 in estimating the number of small businesses that might be affected by the Commission's decisions here.[2170] While certain 1997 census data became available in late 2000 and were not incorporated into the previous NPRM, this updating would not, we believe, have affected a small entity's decisions concerning IRFA. This more recent data are reflected in subsection 3 of the FRFA, *infra*.

738. TeleTruth also contends that "[a] true IRFA analysis about small business telecom competitors would conclude that the current FCC is in violation of the Telecom Act and all of its provisions" because the Commission purportedly has failed to enforce its local competition rules.[2171] Such an

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2168 *Id.* § 609(a)(5).

2169 *See* TeleTruth Reply at 19-20.

2170 *See id.* at 22.

2171 *See id.* at 37-39, 41.

assertion falls outside the scope of this rulemaking proceeding and our analysis herein. Complaints regarding carriers' compliance with the Commission's Rules are properly addressed in other venues. For example, section 208 of the Communications Act specifically permits small businesses and other entities to lodge complaints regarding other carriers' activities, and to seek enforcement of Commission regulations.[2172] Also, to the extent an incumbent LEC's obligations under section 251 are implemented through interconnection agreements, those obligations are enforceable as a matter of contract law through the courts.

739. TeleTruth next argues the RFA requires "an impact study on how [an agency's regulations] will harm small businesses," and that "the FCC has not done anything of the sort for this proceeding."[2173] We disagree: the RFA requires us to provide precisely the information contained in this FRFA, but does not mandate a separate "impact study."[2174] The Commission has therefore satisfied its RFA obligations.

740. In a letter challenging the *UNE Remand Order*, Senator Talent argued that that Order violated section 3(a)(2)(C) of the Small Business Act.[2175] Specifically, Senator Talent noted that the *UNE Remand Order* differentiated between businesses that used fewer than four access lines and those that used four or more lines, in contravention of the Small Business Act's directive that "unless specifically authorized by statute, no Federal department or agency may prescribe a size standard for categorizing a business concern as a small business concern," unless certain procedural

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2172 47 U.S.C. § 208.

2173 TeleTruth Feb. 5, 2003 *Ex Parte* Letter at 4.

2174 *See* 5 U.S.C. § 604.

2175 *See* 15 U.S.C. § 632(a)(2)(C).

requirements are satisfied.[2176] In the present Order, our action does not establish any special small business size standard.

741. TeleTruth and Senator Talent suggest that section 257 of the Act dictates a particular substantive result in this matter. Specifically, TeleTruth claims that this "Triennial Review is mandated in Section [257(c)]," and requires an outcome favorable to entrepreneurs and small businesses.[2177] Senator Talent argued that in limiting the class of elements subject to section 251(c), the *UNE Remand Order* "erected a new barrier to entry" by small business carriers, and consequently violated section 257 of the Communications Act. Section 257, however, did *not* mandate this proceeding and in no way cabins this Commission's exercise of its authority to adopt rules implementing the Act. Section 257 required the Commission to conduct a proceeding designed to identify and eliminate "market entry barriers for entrepreneurs and other small businesses in the provision and ownership of telecommunications services and information services" within 15 months of the enactment of the 1996 Act,[2178] and periodically to review its regulations and report to Congress on any such barriers.[2179] The Commission concluded the requisite proceeding in 1997[2180] and issued its first subsequent section 257 Report to Congress in 2000.[2181] Thus, this proceeding is *not* mandated (or in any way

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2176 *Id.*

2177 TeleTruth Feb. 5, 2003 *Ex Parte* Letter at 3.

2178 *See* 47 U.S.C. § 257(a).

2179 *See id.* § 257(c).

2180 *See Section 257 Proceeding To Identify and Eliminate Market Entry Barriers For Small Businesses*, GN Docket No. 96-113, Report, 12 FCC Rcd 16802 (1997).

2181 *See Section 257 Report to Congress, Identifying and Eliminating Market Entry Barriers For Entrepreneurs and Other Small Businesses*, Report, 15 FCC Rcd 15376 (2000).

governed) by section 257. Rather, as described above, this Order fulfills the Commission's commitment—set forth in the *UNE Remand Order*—to reevaluate unbundling requirements, and responds to various judicial rulings regarding those requirements.[2182]

742. TeleTruth, the NFIB, and SBA Advocacy caution that this Order may stand in violation of Executive Order 13272.[2183] Setting aside the question of whether a multi-member independent agency such as the FCC must comply with that Executive Order, we note that affected agencies must: (1) comply with the RFA, (2) give SBA Advocacy advanced notice of any proposed rules that might substantially impact small businesses, and (3) give "appropriate consideration to" and provide a written response to "any comments provided by" SBA Advocacy. Here, the Commission did send SBA Advocacy a copy of the published Triennial Review NPRM (which pre-dated the Executive Order).[2184] Moreover, in this FRFA, we fully satisfy our obligations under the RFA. Finally, we address SBA Advocacy's other comments below. Therefore, this proceeding stands in compliance with Executive Order 13272.

743. SBA Advocacy argues that the Commission's IRFA "did not consider the impact of delisting unbundled network elements . . . on small competitive local exchange carriers."[2185] While SBA Advocacy recommends that we issue a revised IRFA to account more fully for the impact our rules might have on competitive LECs, it recognizes that we might appropriately address any such impact in this FRFA

2182 *See supra* Parts I, III.

2183 Executive Order No. 13272, 67 Fed. Reg. 53461 (Aug. 16, 2002); *see* TeleTruth Feb. 5, 2003 *Ex Parte* Letter at 6-7; NFIB Feb. 5, 2003 *Ex Parte* Letter at 1; SBA Advocacy Feb. 5, 2003 *Ex Parte* Letter at 2-3.

2184 *Triennial Review NPRM*, 16 FCC Rcd at 22836, para. 135.

2185 SBA Advocacy Feb. 5, 2003 *Ex Parte* Letter at 1.

instead.[2186] We have adopted the latter course. We note that we have considered the concerns of competitive LECs throughout this Order, and those considerations are summarized in Part X.A.5, below. Moreover, in Part X.A.3, we attempt to estimate the number of competitive LECs that will be affected by the rules we adopt herein.

744. SBA Advocacy also claims that the proposals contained in the *Triennial Review NPRM* were not sufficiently specific to allow small businesses the opportunity to comment meaningfully.[2187] We disagree. This proceeding has elicited well over one thousand filings, submitted by scores of parties. These parties—which include numerous small businesses—found in the Notice sufficient specificity to permit meaningful comment. SBA Advocacy notes its "particular concern" that the Commission "is considering removing elements from the list" of incumbent LECs' unbundling obligations, whereas the *Triennial Review NPRM* purportedly gave no indication of this eventuality.[2188] But in fact, the *Triennial Review NPRM* clearly explained that the Commission was considering "an unbundling analysis that is more targeted," including approaches "that take into consideration specific services, facilities, and customer and business considerations."[2189] The Commission expressly sought comment "on applying the unbundling analysis to define the network elements" subject to unbundling,[2190] and indicated its intention to "probe whether and to what extent we should adopt a more sophisticated, refined unbundling analysis."[2191] The Commission also specifically stated its

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2186 *Id.* at 1-2.

2187 *See id.* at 3-4.

2188 *Id.* at 3.

2189 *Triennial Review NPRM*, 16 FCC Rcd at 22789, para. 16.

2190 *Id.*

2191 *Id.* at 22797-98, para. 34.

intention to reexamine unbundling obligations with respect to loops,[2192] switching,[2193] interoffice transport,[2194] OSS,[2195] call-related signaling,[2196] and call-related databases.[2197] We are thus not persuaded that the Notice somehow failed to signal the Commission's intent to examine rules that might result in modification of the list of elements (including possible removal of elements) subject to section 251(c)(3)'s unbundling requirements.

3. Description and Estimate of the Number of Small Entities To Which the Actions Taken Will Apply

745. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules.[2198] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[2199] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[2200] A

2192 *See id.* at 22803-05, paras. 49, 51-52.

2193 *See id.* at 22806-09, paras. 56-62.

2194 *See id.* at 22810-12, paras. 64-66.

2195 *See id.* at 22813, para. 70.

2196 *See id.* at 22812, para. 68.

2197 *See id.* at 22812-13, para. 69.

2198 5 U.S.C. §§ 603(b)(3), 604(a)(3).

2199 *Id.* § 601(6).

2200 *Id.* § 601(3) (incorporating by reference the definition of "small business concern" set forth in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are

small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[2201]

746. In this section, we further describe and estimate the number of small entity licensees and regulatees that may be affected by rules adopted in this Order. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be the data that the Commission published in its *Trends in Telephone Service May 2002* report.[2202] The SBA has developed small business size standards for wireline and wireless small businesses within the three commercial census categories of Wired Telecommunications Carriers,[2203] Paging,[2204] and Cellular and Other Wireless Telecommunications.[2205] Under these categories, a business is small if it has 1,500 or fewer employees. Below, using the above size standards and others, we discuss the total estimated numbers of small businesses that might be affected by our actions.

747. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent

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appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

2201 15 U.S.C. § 632.

2202 *Trends in Telephone Service May 2002 Report* at Table 5.3.

2203 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 513310 (changed to 517110 in Oct. 2002).

2204 *Id.* § 121.201, NAICS code 513321 (changed to 517211 in Oct. 2002).

2205 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

small business size standard (*e.g.*, a wired telecommunications carrier having 1,500 or fewer employees), and "is not dominant in its field of operation."[2206] SBA Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[2207] We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

748. *Wired Telecommunications Carriers.* The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.[2208] According to Census Bureau data for 1997, there were 2,225 firms in this category, total, that operated for the entire year.[2209] Of this total, 2,201 firms had employment of 999 or fewer employees, and an additional 24 firms had employment of

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[2206] 5 U.S.C. § 601(3).

[2207] Letter from Jere W. Glover, Chief Counsel for SBA Advocacy, and Eric E. Menge, Assistant Chief Counsel for Telecommunications, SBA Advocacy, to William E. Kennard, Chairman, FCC, CC Docket Nos. 98-147, 99-68, 97-181 (filed May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b).

[2208] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2209] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)" (1997 Economic Census, Establishment and Firm Size), Table 5, NAICS code 513310 (issued Oct. 2000).

1,000 employees or more.[2210] Thus, under this size standard, the great majority of firms can be considered small.

749. *Incumbent LECs.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to incumbent local exchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2211] According to Commission data, 1,329 carriers reported that they were engaged in the provision of local exchange services.[2212] Of these 1,329 carriers, an estimated 1,024 have 1,500 or fewer employees and 305 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by the rules and policies adopted herein.

750. *Competitive LECs.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to providers of competitive exchange services or to competitive access providers or to "Other Local Exchange Carriers," all of which are discrete categories under which TRS data are collected. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2213] According to Commission data, 532 companies reported that they were engaged in the provision of either competitive access provider

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[2210] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2211] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2212] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2213] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

services or competitive LEC services.[2214] Of these 532 companies, an estimated 411 have 1,500 or fewer employees and 121 have more than 1,500 employees.[2215] In addition, 55 carriers reported that they were "Other Local Exchange Carriers." Of the 55 "Other Local Exchange Carriers," an estimated 53 have 1,500 or fewer employees and two have more than 1,500 employees.[2216] Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, and "Other Local Exchange Carriers" are small entities that may be affected by the rules and policies adopted herein.

751. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to interexchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2217] According to Commission data, 229 companies reported that their primary telecommunications service activity was the provision of interexchange services.[2218] Of these 229 companies, an estimated 181 have 1,500 or fewer employees and 48 have more than 1,500 employees.[2219] Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by the rules and policies adopted herein.

752. *Operator Service Providers (OSPs).* Neither the Commission nor the SBA has developed a size standard for

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[2214] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2215] *Id.*

[2216] *Id.*

[2217] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2218] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2219] *Id.*

small businesses specifically applicable to OSPs. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2220] According to Commission data, 22 companies reported that they were engaged in the provision of operator services.[2221] Of these 22 companies, an estimated 20 have 1,500 or fewer employees and two have more than 1,500 employees.[2222] Consequently, the Commission estimates that the great majority of OSPs are small entities that may be affected by the rules and policies adopted herein.

753. *Prepaid Calling Card Providers.* The SBA has developed a size standard for a small business within the category of Telecommunications Resellers. Under that SBA size standard, such a business is small if it has 1,500 or fewer employees.[2223] According to Commission data, 32 companies reported that they were engaged in the provision of prepaid calling cards.[2224] Of these 32 companies, an estimated 31 have 1,500 or fewer employees and one has more than 1,500 employees.[2225] Consequently, the Commission estimates that the great majority of prepaid calling card providers are small entities that may be affected by the rules and policies adopted herein.

754. *Other Toll Carriers.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to "Other Toll Carriers." This

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[2220] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2221] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2222] *Id.*

[2223] 13 C.F.R. § 121.201, NAICS code-513330 (changed to 517310 in Oct. 2002).

[2224] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2225] *Id.*

category includes toll carriers that do not fall within the categories of interexchange carriers, OSPs, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2226] According to Commission's data, 42 companies reported that their primary telecommunications service activity was the provision of payphone services.[2227] Of these 42 companies, an estimated 37 have 1,500 or fewer employees and five have more than 1,500 employees.[2228] Consequently, the Commission estimates that most "Other Toll Carriers" are small entities that may be affected by the rules and policies adopted herein.

755. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of Paging[2229] and Cellular and Other Wireless Telecommunications.[2230] Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 1997 show that there were 1320 firms in this category, total, that operated for the entire year.[2231] Of this total, 1303 firms had employment of 999 or

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[2226] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2227] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2228] *Id.*

[2229] 13 C.F.R. § 121.201, NAICS code 513321 (changed to 517211 in Oct. 2002).

[2230] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2231] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997" (1997 Economic Census, Employment Size of Firms), Table 5, NAICS code 513321 (issued Oct. 2000).

fewer employees, and an additional 17 firms had employment of 1,000 employees or more.[2232] Thus, under this category and associated small business size standard, the great majority of firms can be considered small. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.[2233] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.[2234] Thus, under this second category and size standard, the great majority of firms can, again, be considered small.

756. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of $40 million or less in the three previous calendar years.[2235] For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the

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[2232] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2233] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513322 (issued Oct. 2000).

[2234] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2235] *See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824 (1996) (*Parts 20 and 24 Amendment Order*); *see also* 47 C.F.R. § 24.720(b).

preceding three calendar years."[2236] These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.[2237] No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.[2238] On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In addition, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

757. *Narrowband PCS.* To date, two auctions of narrowband PCS licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses"

[2236] *See Parts 20 and 24 Amendment Order*, 11 FCC Rcd 7824.

[2237] *See, e.g., Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332 (1994).

[2238] FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. Jan. 14, 1997); *see also Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436 (1997).

were entities with average gross revenues for the prior three calendar years of $40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.[2239] A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $15 million. The SBA has approved these small business size standards.[2240] In the future, the Commission will auction 459 licenses to serve Metropolitan Trading Areas (MTAs) and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future actions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined under the Commission's Rules. The Commission assumes, for purposes of this analysis that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses

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[2239] *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket Nos. ET 92-100, PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456 (2000).

[2240] *See* Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (filed Dec. 2, 1998) (SBA Dec. 2, 1998 *Ex Parte* Letter).

will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

758. *220 MHz Radio Service—Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to "Cellular and Other Wireless Telecommunications" companies. This standard provides that such a company is small if it employs no more than 1,500 persons.[2241] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[2242] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.[2243] If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard.

759. *220 MHz Radio Service—Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*,

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[2241] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2242] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513322 (issued Oct. 2000).

[2243] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

we adopted a small business size standard for "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[2244] This small business size standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years.[2245] A "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed $3 million for the preceding three years. The SBA has approved these small business size standards.[2246] Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.[2247] In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses.

[2244] *Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service,* PR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, at paras. 291-95 (1997) (*220 MHz Third Report and Order*).

[2245] *Id.* at 11068-69, para. 291.

[2246] *See* Letter from Aida Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC (filed Jan. 6, 1998) (SBA Jan. 6, 1998 *Ex Parte* Letter).

[2247] *See generally Phase II 220 MHz Service Auction Closes, Winning Bidders in the Auction of 908 Phase II 220 MHz Service Licenses Down Payments Due November 6, 1998, FCC Form 601s Due November 6, 1998, Ten-Day Petition to Deny Period,* Report No. AUC-18-F, 14 FCC Rcd 605 (1998).

Fourteen companies claiming small business status won 158 licenses.[2248]

760. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards "small entity" and "very small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than $15 million in each of the three previous calendar years, or that had revenues of no more than $3 million in each of the previous calendar years, respectively.[2249] These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than $15 million. One firm has over $15 million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the Small Business Act. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities. Consequently, the Commission estimates that there are 301 or fewer small entity SMR licensees in the 800 MHz and 900 MHz bands that may be affected by the rules and policies adopted herein.

[2248] *Phase II 220 MHz Service Spectrum Auction Closes*, Report No. AUC-24-E, 14 FCC Rcd 11218 (1999).

[2249] 47 C.F.R. § 90.814(b)(1).

761. *Common Carrier Paging.* In the Paging Third Report and Order, we developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[2250] A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $3 million for the preceding three years. An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.[2251] Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. At present, there are approximately 24,000 Private-Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the *Trends in Telephone Service May 2002 Report*, 471 carriers reported that they were engaged in the provision of either paging and messaging services or other mobile services.[2252] Of those, the Commission estimates that 450 are small, under the SBA business size standard specifying that firms are small if they have 1,500 or fewer employees.[2253]

762. *700 MHz Guard Band Licensees.* In the 700 MHz Guard Band Order, we adopted a small business size standard

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[2250] *220 MHz Third Report and Order*, 12 FCC Rcd at 11068-70, paras. 291-95.

[2251] *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, 10085, para. 98 (1999).

[2252] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2253] *Id.* The SBA size standard is that of Paging, 13 C.F.R. § 121.201, NAICS code 517211.

for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[2254] A "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $3 million for the preceding three years. An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.[2255] Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.[2256]

763. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.[2257] A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).[2258] The Commission uses

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[2254] *See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000).

[2255] *See generally 220 MHz Service Auction Closes*, Report No. WT 98-36 (rel Oct. 23, 1998).

[2256] *700 MHz Guard Band Auction Closes*, Report No. AUC-38-F, 16 FCC Rcd 4590 (2001).

[2257] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[2258] BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.[2259] There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

764. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.[2260] We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.[2261] There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

765. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.[2262] Most

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[2259] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2260] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[2261] 13 C.F.R. § 121.201, NAICS codes 513322 (changed to 517212 in Oct. 2002).

[2262] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed $15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed $3 million dollars.[2263] There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

766. *Fixed Microwave Services.* Fixed microwave services include common carrier,[2264] private operational-fixed,[2265] and

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[2263] *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

[2264] *See* 47 C.F.R. § 101 *et seq.* (formerly Part 21 of the Commission's Rules) for common carrier fixed microwave services (except MDS).

[2265] Persons eligible under Parts 80 and 90 of the Commission's Rules can use Private Operational-Fixed Microwave services. *See* 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for

broadcast auxiliary radio services.[2266] At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.[2267] The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 22,015 common carrier fixed licensees and up to 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We noted, however, that the common carrier microwave fixed licensee category includes some large entities.

767. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not

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communications related to the licensee's commercial, industrial, or safety operations.

[2266] Auxiliary Microwave Service is governed by Part 74 of the Commission's Rules. *See* 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

[2267] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.[2268] There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.[2269] Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.[2270]

768. *Wireless Communications Services (WCS).* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the WCS auction. A "small business" is an entity with average gross revenues of $40 million for each of the three preceding years, and a "very small business" is an entity with average gross revenues of $15 million for each of the three preceding years. The SBA has approved these small business size standards.[2271] The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity. We conclude that the number of geographic area WCS licensees affected by this analysis includes these eight entities.

769. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses—an entity that has average gross revenues of $40 million or less in the

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[2268] This service is governed by Subpart I of Part 22 of the Commission's Rules. *See* 47 C.F.R. §§ 22.1001-22.1037.

[2269] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2270] *Id.*

[2271] *See* SBA Dec. 2, 1998 *Ex Parte* Letter.

three previous calendar years.[2272] An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[2273] The SBA has approved these small business size standards.[2274] The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and polices adopted herein.

770. *Multipoint Distribution Service (MDS), Multichannel Multipoint Distribution Service (MMDS), and Instructional Television Fixed Service (ITFS).* MMDS systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the MDS and ITFS.[2275] In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than $40 million in the previous three calendar years.[2276] The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67

[2272] *See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order and Second Notice of Proposed Rulemaking, 12 FCC Rcd 18600 (1997).

[2273] *Id.*

[2274] SBA Feb. 4, 1998 *Ex Parte* Letter.

[2275] *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, Docket Nos. MM 94-131, PP 93-253, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

[2276] 47 C.F.R. § 21.961(b)(1).

auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating $12.5 million or less in annual receipts.[2277] According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.[2278] Of this total, 1,180 firms had annual receipts of under $10 million and an additional 52 firms had receipts of $10 million or more but less than $25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.[2279] Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

771. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.[2280] The auction of the 1,030

[2277] 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in Oct. 2002).

[2278] 1997 Economic Census, Establishment and Firm Size, Table 4, NAICS code 513220 (issued Oct. 2000).

[2279] In addition, the term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

[2280] *See Local Multipoint Distribution Service*, Second Report and Order, CC Docket No. 92-297, 12 FCC Rcd 12545 (1997).

LMDS licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than $40 million in the three previous calendar years.[2281] An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[2282] The SBA has approved these small business size standards in the context of LMDS auctions.[2283] There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

772. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a $6 million net worth and, after federal income taxes (excluding any carry-over losses), has no more than $2 million in annual profits each year for the previous two years.[2284] In the 218-219 MHz Report and Order and

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[2281] *Id.*

[2282] *Id.*

[2283] *See* SBA Jan. 6, 1998 *Ex Parte* Letter.

[2284] *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330 (1994).

Memorandum Opinion and Order, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed $15 million for the preceding three years.[2285] A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed $3 million for the preceding three years.[2286] We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum.

773. *24 GHz—Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.[2287] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[2288] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12

[2285] *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (1999).

[2286] *Id.*

[2287] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2288] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513322 (issued Oct. 2000).

firms had employment of 1,000 employees or more.[2289] Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent and TRW, Inc.[2290] It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

774. *24 GHz—Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of $15 million.[2291] "Very small business" in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding $3 million for the preceding three years.[2292] The SBA has approved these small business size standards.[2293] These size standards will apply to the future auction, if held.

[2289] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2290] Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

[2291] *Amendments to Parts 1,2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 para. 77 (2000) (*Parts 1, 2; 87 and 101 Amendment Order*); *see also* 47 C.F.R. § 101.538(a)(2).

[2292] *Parts 1, 2; 87 and 101 Amendment Order*, 15 FCC Rcd at 16967, para. 77; *see also* 47 C.F.R. § 101.538(a)(1).

[2293] *See* Letter from Gary M. Jackson, Assistant Administrator, SBA, to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis

775. *Internet Service Providers.* While internet service providers (ISPs) are only indirectly affected by our present actions, and ISPs are therefore not formally included within this present FRFA, we have addressed them informally to create a fuller record and to recognize their participation in this proceeding. The SBA has developed a small business size standard for Online Information Services, which consists of all such companies having $21 million or less in annual receipts.[2294] According to Census Bureau data for 1997, there were 2,751 firms in this category, total, that operated for the entire year.[2295] Of this total, 2,659 firms had annual receipts of $9,999,999 or less, and an additional 67 had receipts of $10 million to $24,999,999.[2296] Thus, under this size standard, the great majority of firms can be considered small.

4. Description of Projected Reporting, Record-keeping, and Other Compliance Requirements

776. Pursuant to sections 251(c) and (d) of the Act, incumbent LECs, including those that qualify as small entities, are required to provide nondiscriminatory access to UNEs.[2297] The only exception to this rule applies to qualifying rural carriers that have gone through the process of obtaining an exemption, suspension, or modification pursuant to section 251(f) of the Act. This Order represents, in large part, a fresh examination of the issues presented in

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Division, Wireless Telecommunications Bureau, FCC (filed July 28, 2000) (SBA July 28, 2000 *Ex Parte* Letter).

[2294] 13 C.F.R. § 121.201, NAICS code 514191 (changed to 518111 in Oct. 2002).

[2295] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Receipts Size of Firms Subject to Federal Income Tax: 1997" (1997 Economic Census, Receipts Size of Firms), Table 4, NAICS code 514191 (issued Oct. 2000).

[2296] *Id.*

[2297] 47 U.S.C. § 251(c), (d).

implementing the unbundling requirements of section 251, based on comments from interested parties responding to the *Triennial Review NPRM*. This Order also interprets the necessary and impair standards of section 251(d)(2) in a manner that satisfies the D.C. Circuit's directives that (1) the Commission eschew broad national standards in favor of more granular analysis,[2298] and that, (2) in determining whether a carrier is "impaired" by diminished access to a given element, the Commission distinguish between "cost disparities that are universal as between new entrants and incumbents in *any* industry" and disparities resulting specifically from the conditions of natural monopoly that the Act is designed to redress.[2299]

777. In this Order, we determine that requesting carriers (1) are impaired without access to local circuit switching in providing service to mass market customers using DS0 capacity loops;[2300] (2) are presumed not impaired without access to unbundled local circuit switching for the enterprise market;[2301] (3) are not impaired without access to packet switching, including routers and DSLAMs;[2302] (4) are not impaired without access to incumbent LECs' signaling systems except where they are also impaired without access to the incumbent LEC's unbundled circuit switching;[2303] (5) are impaired without unbundled access to the incumbent LEC's 911 and e911 databases;[2304] (6) are not impaired without access to the incumbent LEC's other call-related

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2298 *USTA*, 290 F.3d at 422.

2299 *Id.* at 426.

2300 *See supra* Part VI.D.6.

2301 State commissions may rebut this finding as specified above. *See supra* Part VI.D.1.

2302 *See supra* Part VI.A.2.

2303 *See supra* Part VI.A.3.

2304 *See supra* Part VI.A.4.

databases if they deploy their own switches, but otherwise are impaired;[2305] (7) are impaired without access to incumbent LECs' OSS;[2306] (8) are impaired without access to copper loop or subloop facilities (and must condition copper loops for provision of advanced services), but are not impaired without access to line-sharing (subject to a three-year transition) or hybrid loops;[2307] (9) are not impaired without access to new build/greenfield fiber-to-the-home (FTTH) loops for broadband or narrowband services or overbuild/brownfield FTTH loops for broadband services;[2308] (10) are not impaired without unbundled access to OCn capacity loop facilities, but are impaired, subject to certain triggers, without access to dark fiber loops, DS1 loops, and DS3 loops;[2309] (11) are impaired without access to unbundled subloops associated with accessing customer premises wiring at multiunit premises and are also impaired without unbundled access to the incumbent LEC Inside Wire Subloops and NIDs, regardless of loop type;[2310] (12) are not impaired without unbundled access to OCn transport facilities, but are impaired, subject to certain triggers, without access to dark fiber transport facilities, DS1 transport facilities, and DS3 transport facilities;[2311] and (13) are impaired without access to unbundled shared transport only to the extent they are impaired without access to local circuit switching.[2312] The

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2305 *See id.*

2306 *See supra* Part VI.A.5.

2307 Incumbent LECs also may not retire copper loops without state approval. *See supra* Part VI.B.1. The Commission reaffirms incumbent LEC line-splitting obligations. *See supra* Part VI.B.1.

2308 *See supra* Part VI.B.2.

2309 *See supra* Part VI.B.3.

2310 *See supra* Parts VI.B.2, VI.B.3.

2311 *See supra* Part VI.B.3.

2312 *See supra* Part VI.B.4.

Order also affirms that incumbent LECs are obligated to provide access to UNE combinations.[2313]

778. In this Order, we adopt rules to implement a congressionally-mandated scheme, embodied in Section 251 of the Act, that imposes upon incumbent LECs an obligation to provide unbundled access to certain network elements. This Order articulates a new impairment standard to govern which network elements incumbent LECs must unbundle for competitors in accordance with the Act. While this Order imposes no general obligations on competitive LECs, the Order does require competitive LECs to satisfy certain reporting requirements in order to obtain as UNEs certain high-capacity network elements from incumbent LECs. We have attempted to keep the obligations imposed by this Order to the minimum necessary to implement the requirements of the Act.

779. In addition, this Order outlines procedures whereby states may conduct proceedings to determine whether certain network elements satisfy our impairment standard according to specific guidelines and triggers, as outlined in the Order. While this Order does not specifically impose any obligations on carriers in this regard, records regarding facility use may be necessary for these state proceedings.

780. The various compliance requirements contained in this Order will require the use of engineering, technical, operational, accounting, billing, and legal skills. The carriers that are affected by these requirements already possess these skills. This Order contains new or modified information collections, which are subject to Office of Management and Budget review pursuant to the Paperwork Reduction Act of 1995.[2314]

2313 *See supra* Part VI.B.6.

2314 Pub. L. No. 104-13, 109 Stat. 163 (codified at 44 U.S.C. § 3507).

5. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

781. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[2315]

782. In this Order, we adopt rules regarding the unbundling of network elements. We have modified our impairment analysis to find that a requesting carrier is impaired when lack of access to a facility in the incumbent LEC's network poses barriers that are likely to make entry into the market uneconomic.[2316] These can include both operational and economic barriers, such as scale economies, sunk costs, first mover advantages, absolute cost advantages, and barriers within the control of the incumbent LEC. In adopting this interpretation, we considered a variety of factors relating to the size of regulated entities and the customers they serve.[2317] We considered a number of barriers to competitive entry, including those faced by small competitors, as well as the importance of scale economies as they relate to small

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2315 5 U.S.C. § 603(c).

2316 *See supra* Part V.B.

2317 *See id.*

entities.[2318] Finally, we considered and rejected a number of suggested approaches to impairment.[2319]

783. In applying our impairment analysis to specific network elements, we adopt a more granular approach, including the considerations of customer class, geography, and service. We found that conducting a more granular analysis permits us to distinguish, with more particularity, those situations for which there is impairment from those for which there is none. We also found that an even more granular analysis—loop by loop, for example—is neither administratively feasible nor required by the courts.[2320] We considered the differing needs of three classes of telecommunications customers: mass market customers (*i.e.*, residential customers and sometimes very small business customers), small and medium enterprise customers, and large enterprise customers.[2321] Mass market customers typically generate lower revenue and tighter profit margins than the other classes and therefore require service providers to minimize costs. Small and medium business customers typically are willing to pay higher prices but are more sensitive to reliability and quality of service. Large enterprise customers tend to demand extensive and sophisticated service packages, and reliability and quality of service are essential to these customers.

784. In addition, because requiring unbundling in the absence of impairment imposes unnecessary costs—including for small or rural incumbent LECs—we considered whether

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[2318] *See id.*

[2319] These include, for example, the essential facilities doctrine, an antitrust analysis, a market power analysis, and the approach to impairment the Commission took in the *UNE Remand Order*. *See supra* Part V.B.

[2320] *See supra* Part V.B.

[2321] *Id.*

impairment varies geographically throughout the country. We make unbundling decisions on a national scale where the record permits us to, but delegate some determining role to the states where it appears that impairment might exist in some regions of the country but not others.[2322] In this regard, we note that Congress provided a mechanism—in section 251(f) of the Act—to exempt small and rural incumbent LECs from several of the Act's obligations.[2323] For example, unbundling rules shall not apply to a rural telephone company until it receives a bona fide request for interconnection and until the state commission determines that the request is technically feasible, not unduly economically burdensome, and consistent with section 254.[2324] Or, a LEC with fewer than two percent of the nation's subscriber lines may obtain relief from unbundling if the state commission decides, among other things, that relief is necessary to avoid imposing a economically burdensome requirement or other significant adverse economic impact.[2325]

785. Through our granular impairment analysis, we have considered the resources and needs of various carriers, including small businesses, and have examined the state of the marketplace to determine whether it was economically feasible for competitors to self-provision network elements or obtain them from competitive sources other than incumbent LECs.[2326] We believe this approach strikes the appropriate balance between the needs of competitors—including small competitors—to access certain network elements, against the burdens unbundling imposes upon incumbent LECs—

2322 *Id.*

2323 *See* 47 U.S.C. § 251(f).

2324 *See id.* § 251(f)(1).

2325 *See id.* § 251(f)(2).

2326 *See, e.g., supra* Part VI.B.3. (Dedicated Interoffice Transmission Facilities).

including small incumbents—and yields a more accurate picture of the state of competition for each of the varied network elements composing the local telephone network. For those network elements for which carriers may be *impaired only in certain geographic markets*, such as certain high-capacity loops and transport, we adopt an approach that permits localized determination—with a role for the states—as to where and whether impairment exists.[2327] In this way, we have sought to take a more specific view of the needs of differently situated competitors.

786. We also have established service eligibility requirements for UNEs which are designed to ensure that carriers use UNEs primarily to provide local services in competition with incumbent LECs, "while avoiding burdensome administrative rules that serve as a drag on competitive entry."[2328] While we recognize that regulatory requirements may disproportionately impact smaller entities, we have adopted the least burdensome of several available alternatives in requiring competitors to satisfy certain service eligibility criteria.[2329] For example, rather than requiring carriers to certify to be the sole provider of local service in order to access certain elements (*e.g.*, high-capacity loops and transport)—an approach that might require frequent and costly assurance from a carrier's customers—we permit carriers to certify that they are the primary providers of local service.[2330] In this regard, we find that being certified as a competitive LEC is probative of providing qualifying

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[2327] *See, e.g.*, *supra* Parts V.E. (Role of the States), VI.B.3. (Dedicated Interoffice Transmission Facilities).

[2328] *See, e.g.*, *supra* Parts V.B.2. (Granularity of the Impairment Analysis), VI.B.6 (Service Eligibility to Access UNEs).

[2329] *Id.*

[2330] *See, e.g.*, *supra* Part VI.B.6. (Service Eligibility to Access UNEs).

service.[2331] We also adopt collocation and local interconnection requirements as less burdensome ways of assuring service eligibility.[2332] By contrast, we have rejected a number of suggested approaches as unnecessarily burdensome, such as measuring minutes or traffic percentages, separately measuring voice and data use, or permitting UNEs only where a competitive carrier uses certain types of switches.[2333] We find that our adopted indicia of service eligibility serve as adequate and less burdensome assurance that a carrier is using UNEs in a manner consistent with the local competition goals of the Act.[2334]

6. Report to Congress

787. The Commission will send a copy of the Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.[2335] In addition, the Commission will send a copy of the Order, including the FRFA, to the Chief Counsel for SBA Advocacy. The Order and FRFA, or summaries thereof, will also be published in the Federal Register.[2336]

B. Initial Regulatory Flexibility Analysis

788. As required by the RFA,[2337] the Commission has prepared this IRFA of possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this FNPRM. Written public comments are

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2331 *Id.*

2332 *Id.*

2333 *Id.*

2334 *Id.*

2335 *See* 5 U.S.C. § 801(a)(1).

2336 *See* 5 U.S.C. § 604(b).

2337 *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the SBREFA, Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

sought on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the FNPRM, provided below in Part X.C. The Commission will send a copy of the FNPRM, including this IRFA, to the Chief Counsel for SBA Advocacy.[2338] In addition, the FNPRM and IRFA (or summaries thereof) will be published in the Federal Register.[2339]

1. Need for, and Objectives of, the Proposed Rules

789. We initiate the FNPRM portion of this proceeding to ensure that market-based incentives exist for incumbent and competitive LECs to negotiate innovative commercial interconnection arrangements. The current pick-and-choose rules implementing section 252(i) may discourage give-and-take negotiation because incumbent LECs may be reluctant to make significant concessions (in exchange for negotiated benefit) if those concessions become automatically available—without any tradeoff—to every potential market entrant. We therefore seek comment on whether alternate approaches to implementing section 252(i), such as requiring third parties to opt into entire agreements, would promote more innovative and flexible arrangements between parties. Any changes to the current pick-and-choose rule, however, may raise concerns as to whether there is the potential for parties to interconnection agreements to include "poison pill" language that would deter third parties from opting into those agreements under section 252(i). This FNPRM proposes an approach that would eliminate the current pick-and-choose regime for incumbent LECs wherever the incumbent LEC has filed and received state approval of a statement of generally available terms and conditions (SGAT), and this FNPRM seeks to build a record from which to judge the wisdom of this approach.

[2338] *See* 5 U.S.C. § 603(a).

[2339] *Id.*

2. Legal Basis

790. The legal basis for any action that may be taken pursuant to the FNPRM is contained in Sections 1, 3, 4, 201-205, 251, 256, 271, 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, 303(r).

3. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Would Apply

791. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules.[2340] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[2341] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[2342] A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.[2343]

792. In this section, we further describe and estimate the number of small entity licensees and regulatees that may be

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2340 5 U.S.C. §§ 603(b)(3), 604(a)(3).

2341 *Id.* § 601(6).

2342 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

2343 15 U.S.C. § 632.

affected by rules proposed in this FNPRM. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be the data that the Commission publishes in its *Trends in Telephone Service* report.[2344] The SBA has developed small business size standards for wireline and wireless small businesses within the three commercial census categories of Wired Telecommunications Carriers,[2345] Paging,[2346] and Cellular and Other Wireless Telecommunications.[2347] Under these categories, a business is small if it has 1,500 or fewer employees. Below, using the above size standards and others, we discuss the total estimated numbers of small businesses that might be affected by our actions.

793. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a wired telecommunications carrier having 1,500 or fewer employees), and "is not dominant in its field of operation."[2348] SBA Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[2349] We have therefore

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[2344] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2345] 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 513310 (changed to 517110 in Oct. 2002).

[2346] 13 C.F.R. § 121.201, NAICS code 513321 (changed to 517211 in Oct. 2002).

[2347] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2348] 5 U.S.C. § 601(3).

[2349] Letter from Jere W. Glover, Chief Counsel for SBA Advocacy, and Eric E. Menge, Assistant Chief Counsel for Telecommunications, SBA Advocacy, to William E. Kennard, Chairman, FCC, CC Docket Nos. 98-147, 99-68, 97-181 (filed May 27, 1999). The Small Business Act

included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

794. *Wired Telecommunications Carriers.* The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.[2350] According to Census Bureau data for 1997, there were 2,225 firms in this category, total, that operated for the entire year.[2351] Of this total, 2,201 firms had employment of 999 or fewer employees, and an additional 24 firms had employment of 1,000 employees or more.[2352] Thus, under this size standard, the great majority of firms can be considered small.

795. *Incumbent LECs.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to incumbent local exchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2353] According to Commission data, 1,329 carriers

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contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b).

[2350] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2351] 1997 Economic Census, Establishment and Firm Size, Table 5, NAICS code 513310 (issued Oct. 2000).

[2352] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2353] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

reported that they were engaged in the provision of local exchange services.[2354] Of these 1,329 carriers, an estimated 1,024 have 1,500 or fewer employees and 305 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by the rules and policies adopted herein.

796. *Competitive LECs.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to providers of competitive exchange services or to competitive access providers or to "Other Local Exchange Carriers," all of which are discrete categories under which TRS data are collected. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2355] According to Commission data, 532 companies reported that they were engaged in the provision of either competitive access provider services or competitive LEC services.[2356] Of these 532 companies, an estimated 411 have 1,500 or fewer employees and 121 have more than 1,500 employees.[2357] In addition, 55 carriers reported that they were "Other Local Exchange Carriers." Of the 55 "Other Local Exchange Carriers," an estimated 53 have 1,500 or fewer employees and two have more than 1,500 employees.[2358] Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, and

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2354 *Trends in Telephone Service May 2002 Report* at Table 5.3.

2355 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

2356 *Trends in Telephone Service May 2002 Report* at Table 5.3.

2357 *Id.*

2358 *Id.*

"Other Local Exchange Carriers" are small entities that may be affected by the rules and policies adopted herein.

797. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to interexchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2359] According to Commission data, 229 companies reported that their primary telecommunications service activity was the provision of interexchange services.[2360] Of these 229 companies, an estimated 181 have 1,500 or fewer employees and 48 have more than 1,500 employees.[2361] Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by the rules and policies adopted herein.

798. *OSPs.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to OSPs. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2362] According to Commission data, 22 companies reported that they were engaged in the provision of operator services.[2363] Of these 22 companies, an estimated 20 have 1,500 or fewer employees and two have more than 1,500 employees.[2364] Consequently, the

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[2359] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2360] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2361] *Id.*

[2362] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2363] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2364] *Id.*

Commission estimates that the great majority of OSPs are small entities that may be affected by the rules and policies adopted herein.

799. *Prepaid Calling Card Providers.* The SBA has developed a size standard for a small business within the category of Telecommunications Resellers. Under that SBA size standard, such a business is small if it has 1,500 or fewer employees.[2365] According to Commission data, 32 companies reported that they were engaged in the provision of prepaid calling cards.[2366] Of these 32 companies, an estimated 31 have 1,500 or fewer employees and one has more than 1,500 employees.[2367] Consequently, the Commission estimates that the great majority of prepaid calling card providers are small entities that may be affected by the rules and policies adopted herein.

800. *Other Toll Carriers.* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to "Other Toll Carriers." This category includes toll carriers that do not fall within the categories of interexchange carriers, OSPs, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[2368] According to Commission's data, 42 companies reported that their primary telecommunications service activity was the provision of payphone services.[2369] Of these 42 companies, an

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[2365] 13 C.F.R. § 121.201, NAICS code 513330 (changed to 517310 in Oct. 2002).

[2366] *Trends in Telephone Service May 2002 Report* at Table 5.3.

[2367] *Id.*

[2368] 13 C.F.R. § 121.201, NAICS code 513310 (changed to 517110 in Oct. 2002).

[2369] *Trends in Telephone Service May 2002 Report* at Table 5.3.

estimated 37 have 1,500 or fewer employees and five have more than 1,500 employees.[2370] Consequently, the Commission estimates that most "Other Toll Carriers" are small entities that may be affected by the rules and policies adopted herein.

801. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of Paging[2371] and Cellular and Other Wireless Telecommunications.[2372] Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 1997 show that there were 1320 firms in this category, total, that operated for the entire year.[2373] Of this total, 1303 firms had employment of 999 or fewer employees, and an additional 17 firms had employment of 1,000 employees or more.[2374] Thus, under this category and associated small business size standard, the great majority of firms can be considered small. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.[2375] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of

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[2370] *Id.*

[2371] 13 C.F.R. § 121.201, NAICS code 513321 (changed to 517211 in Oct. 2002).

[2372] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2373] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513321 (issued Oct. 2000).

[2374] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2375] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513322 (issued Oct. 2000).

1,000 employees or more.[2376] Thus, under this second category and size standard, the great majority of firms can, again, be considered small.

802. *Broadband PCS.* The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of $40 million or less in the three previous calendar years.[2377] For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years."[2378] These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.[2379] No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for

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[2376] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2377] *See Amendment of Parts 20 and 24 of the Commission's Rules—Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824 (1996); *see also* 47 C.F.R. § 24.720(b).

[2378] *See Amendment of Parts 20 and 24 of the Commission's Rules—Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824 (1996).

[2379] *See, e.g., Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332 (1994).

Blocks D, E, and F.[2380] On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 305, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In addition, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

803. *Narrowband PCS.* To date, two auctions of narrowband PCS licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of $40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.[2381] A "small business" is an entity that, together

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[2380] *Broadband PCS, D, E and F Block Auction Closes*, (rel. Jan. 14, 1997); *see also Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436 (1997).

[2381] *In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket Nos. ET 92-100, PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456 (2000).

with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $15 million. The SBA has approved these small business size standards.[2382] In the future, the Commission will auction 459 licenses to serve MTAs and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future actions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined under the Commission's Rules. The Commission assumes, for purposes of this analysis that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

804. *220 MHz Radio Service—Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to "Cellular and Other Wireless Telecommunications" companies. This standard provides

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[2382] *See* SBA Dec. 2, 1998 *Ex Parte* Letter.

that such a company is small if it employs no more than 1,500 persons.[2383] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[2384] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.[2385] If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard.

805. *220 MHz Radio Service—Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[2386] This small business size standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years.[2387] A "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed $3 million for the preceding three years. The SBA has approved these small business size

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[2383] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2384] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513322 (issued Oct. 2000).

[2385] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2386] *220 MHz Third Report and Order*, 12 FCC Rcd at 11068-70, paras. 291-295.

[2387] *Id.* at para. 291.

standards.[2388] Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.[2389] In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional EAG Licenses, and 875 EA Licenses. Of the 908 licenses auctioned, 693 were sold. Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.[2390]

806. *800 MHz and 900 MHz SMR Licenses.* The Commission awards "small entity" and "very small entity" bidding credits in auctions for SMR geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than $15 million in each of the three previous calendar years, or that had revenues of no more than $3 million in each of the previous calendar years, respectively.[2391] These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than $15 million. One firm has over $15 million in revenues. The Commission assumes, for purposes here, that

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2388 *See* SBA Jan. 6, 1998 *Ex Parte* Letter.

2389 *See generally, Phase II 220 MHz Service Auction Closes, Winning Bidders in the Auction of 908 Phase II 220 MHz Service Licenses, Down Payments Due November 6, 1998, FCC Form 601s Due November 6, 1998, Ten-Day Petition to Deny Period*, Report No. AUC-18-F, DA No. 98-2143, 14 FCC Rcd 605 (rel. Oct. 23, 1998).

2390 *Phase II 220 MHz Service Spectrum Auction Closes*, Report No. AUC-24-E, DA 99-1287, 14 FCC Rcd 11218 (rel. July 1, 1999).

2391 47 C.F.R. § 90.814(b)(1).

all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the Small Business Act. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities. Consequently, the Commission estimates that there are 301 or fewer small entity SMR licensees in the 800 MHz and 900 MHz bands that may be affected by the rules and policies adopted herein.

807. *Common Carrier Paging.* In the Paging Third Report and Order, we developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[2392] A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $3 million for the preceding three years. An auction of MEA licenses commenced on February 24, 2000, and closed on March 2, 2000.[2393] Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. At present, there are approximately 24,000 Private-Paging site-

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[2392] *220 MHz Third Report and Order*, 12 FCC Rcd at 11068-70, paras. 291-95.

[2393] *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030, para. 98 (1999).

specific licenses and 74,000 Common Carrier Paging licenses. According to the *Trends in Telephone Service May 2002 Report*, 471 carriers reported that they were engaged in the provision of either paging and messaging services or other mobile services.[2394] Of those, the Commission estimates that 450 are small, under the SBA business size standard specifying that firms are small if they have 1,500 or fewer employees.[2395]

808. *700 MHz Guard Band Licensees.* In the 700 MHz Guard Band Order, we adopted a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[2396] A "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than $3 million for the preceding three years. An auction of 52 MEA licenses commenced on September 6, 2000, and closed on September 21, 2000.[2397] Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these

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2394 *Trends in Telephone Service May 2002 Report* at Table 5.3.

2395 *Id.* The SBA size standard is that of Paging, 13 C.F.R. § 121.201, NAICS code 517211.

2396 *See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000).

2397 *See generally, 220 MHz Service Auction Closes*, Report No. WT 98-36 (rel Oct. 23, 1998).

bidders was a small business that won a total of two licenses.[2398]

809. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.[2399] A significant subset of the Rural Radiotelephone Service is the BETRS.[2400] The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.[2401] There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

810. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.[2402] We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.[2403] There are approximately 100 licensees in the Air-Ground Radio-

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[2398] *700 MHz Guard Band Auction Closes*, Report No. AUC-38-F, DA 01-478, 16 FCC Rcd 4590 (rel. Feb. 22, 2001).

[2399] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[2400] BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

[2401] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2402] The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

[2403] 13 C.F.R. § 121.201, NAICS codes 513322 (changed to 517212 in Oct. 2002).

telephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

811. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a VHF marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.[2404] Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed $15 million dollars. In addition, a "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed $3 million

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[2404] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

dollars.[2405] There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

812. *Fixed Microwave Services.* Fixed microwave services include common carrier,[2406] private operational-fixed,[2407] and broadcast auxiliary radio services.[2408] At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or

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[2405] *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

[2406] *See* 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission's Rules) for common carrier fixed microwave services (except MDS).

[2407] Persons eligible under Parts 80 and 90 of the Commission's Rules can use Private Operational-Fixed Microwave services. *See* 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

[2408] Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. *See* 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

fewer employees.[2409] The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 22,015 common carrier fixed licensees and up to 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We noted, however, that the common carrier microwave fixed licensee category includes some large entities.

813. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.[2410] There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.[2411] Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.[2412]

814. *WCS.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the WCS auction. A "small business" is an entity with

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[2409] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2410] This service is governed by Subpart I of Part 22 of the Commission's Rules. *See* 47 C.F.R. §§ 22.1001-22.1037.

[2411] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2412] *Id.*

average gross revenues of $40 million for each of the three preceding years, and a "very small business" is an entity with average gross revenues of $15 million for each of the three preceding years. The SBA has approved these small business size standards.[2413] The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity. We conclude that the number of geographic area WCS licensees affected by this analysis includes these eight entities.

815. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses—an entity that has average gross revenues of $40 million or less in the three previous calendar years.[2414] An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[2415] The SBA has approved these small business size standards.[2416] The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and polices adopted herein.

816. *MDS, MMDS, and ITFS.* MMDS systems, often referred to as "wireless cable," transmit video programming

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2413 *See* SBA Dec. 2, 1998 *Ex Parte* Letter.

2414 *See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order and Second Notice of Proposed Rulemaking, 12 FCC Rcd 18600 (1997).

2415 *Id.*

2416 *See* SBA Feb. 4, 1998 *Ex Parte* Letter.

to subscribers using the microwave frequencies of the MDS and ITFS.[2417] In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than $40 million in the previous three calendar years.[2418] The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 BTAs. Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies generating $12.5 million or less in annual receipts.[2419] According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.[2420] Of this total, 1,180 firms had annual receipts of under $10 million and an additional 52 firms had receipts of $10 million or more but less than $25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included

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[2417] *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, Docket Nos. MM 94-131, PP 93-253, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

[2418] 47 C.F.R. § 21.961(b)(1).

[2419] 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in Oct. 2002).

[2420] 1997 Economic Census, Establishment and Firm Size, Table 4, NAICS code 513220 (issued Oct. 2000).

in this analysis as small entities.[2421] Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

817. *LMDS.* LMDS is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.[2422] The auction of the 1,030 LMDS licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than $40 million in the three previous calendar years.[2423] An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[2424] The SBA has approved these small business size standards in the context of LMDS auctions.[2425] There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

[2421] In addition, the term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

[2422] *See Local Multipoint Distribution Service*, CC Docket No. 92-297, Second Report and Order, 12 FCC Rcd 12545 (1997).

[2423] *Id.*

[2424] *Id.*

[2425] *See* SBA Jan. 6, 1998 *Ex Parte* Letter.

818. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 MSA licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a $6 million net worth and, after federal income taxes (excluding any carry-over losses), has no more than $2 million in annual profits each year for the previous two years.[2426] In the 218-219 MHz Report and Order and Memorandum Opinion and Order, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed $15 million for the preceding three years.[2427] A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed $3 million for the preceding three years.[2428] We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum.

819. *24 GHz—Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other

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[2426] *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330 (1994).

[2427] *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497 (1999).

[2428] *Id.*

Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.[2429] According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.[2430] Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.[2431] Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent and TRW, Inc.[2432] It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

820. *24 GHz—Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of $15 million.[2433] "Very small business" in the 24 GHz band is an

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[2429] 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

[2430] 1997 Economic Census, Employment Size of Firms, Table 5, NAICS code 513322 (issued Oct. 2000).

[2431] *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

[2432] Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

[2433] *Amendments to Parts 1,2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and

entity that, together with controlling interests and affiliates, has average gross revenues not exceeding $3 million for the preceding three years.[2434] The SBA has approved these small business size standards.[2435] These size standards will apply to the future auction, if held.

821. *ISPs.* While ISPs are only indirectly affected by our present actions, and ISPs are therefore not formally included within this present IRFA, we address them informally to create a fuller record. The SBA has developed a small business size standard for Online Information Services, which consists of all such companies having $21 million or less in annual receipts.[2436] According to Census Bureau data for 1997, there were 2,751 firms in this category, total, that operated for the entire year.[2437] Of this total, 2,659 firms had annual receipts of $9,999,999 or less, and an additional 67 had receipts of $10 million to $24,999,999.[2438] Thus, under this size standard, the great majority of firms can be considered small.

Order, 15 FCC Rcd 16934, 16967 (2000); *see also* 47 C.F.R. § 101.538(a)(2).

[2434] *Amendments to Parts 1,2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967 (2000); *see also* 47 C.F.R. § 101.538(a)(1).

[2435] *See* SBA July 28, 2000 *Ex Parte* Letter.

[2436] 13 C.F.R. § 121.201, NAICS code 514191 (changed to 518111 in Oct. 2002).

[2437] 1997 Economic Census, Receipts Size of Firms, Table 4, NAICS code 514191 (issued Oct. 2000).

[2438] *Id.*

4. Description of Projected Reporting, Record-keeping, and Other Compliance Requirements

822. In this FNPRM, we seek comment on proposed rules that would eliminate the current pick-and-choose rules under some circumstances.[2439] The proposed changes may restrict competitive LECs' choices to opt into specific terms and conditions of existing interconnection agreements, perhaps requiring competitors to opt into entire agreements or negotiate their own agreements with incumbents. The proposed rules may encourage incumbent LECs to seek approval from state public utility commissions for statements of generally available terms and conditions.

5. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

823. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[2440]

824. In this FNPRM, we seek comment on amending the pick-and-choose rules in a manner that encourages more customized contracts between competitive and incumbent LECs, as envisioned by the Act. The FNPRM proposes to remove disincentives to the ability of incumbent LECs and

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[2439] *See supra* Part IX.

[2440] 5 U.S.C. § 603(c).

competitive LECs to negotiate more customized agreements, including agreements that may include significant concessions in exchange for negotiated benefits. In doing so, the FNPRM also seeks to minimize the potential for discrimination against third parties that may seek to opt into the entire agreement by proposing that incumbent LECs first file and receive state approval for a statement of generally available terms and conditions (SGAT) before the incumbent LEC may file other interconnection agreements not subject to the pick-and-choose rules.

825. Changing the current rules, in favor of an approach where competitive LECs—including small entities—must opt into entire agreements, rather than individual terms and conditions, may impose additional burdens on these parties than they currently bear. We will consider, therefore, maintaining the current pick-and-choose rules. The current rules, however, may expose incumbent LECs to the risk that subsequent entrants may reap a one-sided benefit from negotiated concessions made between the incumbent LEC and the actual contracting competitive LEC, and this may form a disincentive to negotiation to both negotiating parties. This may, in turn, impose additional burdens on competitors and incumbents as the parties attempt to reach agreements and resolve disputes, often through arbitration and litigation, in a regulatory environment that creates disincentives for either party to compromise. For this reason, we do not propose to establish a separate pick-and-choose regime to govern small business incumbents or competitors. We believe the alternative advanced in the FNPRM—by proposing to modify the application of the pick-and-choose rule for any incumbent LEC that files and receives state approval of a statement of generally available terms and conditions (SGAT)—would serve the Commission's goal of encouraging negotiation while protecting the rights and interests of competitors, including small businesses. We invite comment on this approach, and we plan to review the

record assembled in response to the FNPRM with a view to considering the least burdensome way to achieve market-driven contract negotiations.

6. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

826. None.

C. Other Procedural Matters

1. Ex Parte Presentations

827. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[2441] Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented in generally required.[2442] Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.

2. Comment Filing Procedures

828. Pursuant to sections 1.415 and 1.419 of the Commission's rules,[2443] interested parties may file comments not later than 30 days after publication of this Notice in the Federal Register and may file reply comments not later than 30 days after the date for filing comments. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.[2444] Comments filed through the ECFS can be sent as an electronic file via the

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2441 47 C.F.R. § 1.1200 *et seq.*

2442 *See* 47 C.F.R. § 1.1206(b)(2).

2443 47 C.F.R. §§ 1.415, 1.419,

2444 *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and five copies of each filing. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Vistronix, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, S.W., Washington, D.C. 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

3. Scope of Written *Ex Parte* Presentations Included in This Proceeding

829. The Commission adopted the substance of this Order at an open meeting on February 20, 2003. Originally, this meeting was scheduled for February 13, 2003 by a notice issued February 6, 2003, which initiated the Sunshine period prohibition on *ex parte* presentations to the Commission and staff. The Commission lifted this Sunshine restriction late on February 10, 2003, but reimposed it on February 13, 2003 by releasing a public notice announcing inclusion of this proceeding on the Sunshine agenda for a Commission meeting on February 20, 2003. In light of these facts and the widespread interest in this proceeding, we find it in the public interest to include in the record *ex parte* presentations that were made on February 10, but prior to the lifting of the Sunshine restriction. We also include in the record *ex parte* presentations made during the imposition of the Sunshine restriction in direct response to an express request by a Commissioner or Commission staff.

XI. ORDERING CLAUSES

830. Accordingly, IT IS ORDERED that pursuant to Sections 1, 3, 4, 201-205, 251, 256, 271, 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt, the *Report and Order on Remand and Further Notice of Proposed Rulemaking* in CC Docket No. 01-338 IS ADOPTED, and that Part 51 of the Commission's Rules, 47 C.F.R. Part 51, is amended as set forth in Appendix B. The requirements of this Order shall become effective 30 days after publication in the Federal Register, pending Office of Management and Budget (OMB) approval.[2445] The

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[2445] In light of the importance of these rules, the Commission is seeking emergency approval from OMB.

Commission will publish a document in the Federal Register announcing the effective date of these rules.

831. IT IS FURTHER ORDERED that the collection of information contained herein is contingent upon approval by the OMB.

832. IT IS FURTHER ORDERED, pursuant to sections 1, 3, 4, 201-205, 251, 256, 271, and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, and 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt. that the petitions for reconsideration of the *UNE Remand Order* filed in CC Docket No. 96-98 by Low Tech Designs, Inc. on February 15, 2000 and by the Telecommunications Resellers Association on February 18, 2000; the petition for partial reconsideration of the *UNE Remand Order* filed in CC Docket No. 96-98 by Birch Telecom, Inc. on February 17, 2000; the petition for reconsideration and clarification of the *UNE Remand Order* filed in CC Docket No. 96-98 by Sprint Corporation on February 17, 2000; the petition for clarification on reconsideration of the *UNE Remand Order* filed in CC Docket No. 96-98, 95-185 by MGC Communications, Inc., d/b/a Mpower Communications, Corp. on February 17, 2000; the joint petition filed in CC Docket No. 96-98 by BellSouth Corporation and BellSouth Telecommunications, Inc., SBC Communications, Inc., and Verizon Telephone Companies on April 5, 2001; the petitions for waiver of the supplemental order clarification filed in CC Docket No. 96-98 by WorldCom, Inc. on September 12, 2000 and ITC^DeltaCom Communications, Inc. on August 16, 2001; the petition filed in CC Docket Nos. 01-338, 96-98, 98-147 by Promoting Active Competition Everywhere (PACE) Coalition on February 6, 2002; and the petition for declaratory ruling filed in CC Docket No. 01-338 by WorldCom, Inc. on August 8, 2002 ARE DISMISSED AS MOOT.

833. IT IS FURTHER ORDERED, pursuant to sections 1, 3, 4, 201-205, 251, 256, 271, and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, and 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt. that the joint petition for declaratory ruling filed in CC Docket No. 96-98 by AT&T Wireless Services, Inc. and VoiceStream Wireless, Corp. on November 19, 2001 IS GRANTED to the extent indicated herein and otherwise IS MOOT.

834. IT IS FURTHER ORDERED, pursuant to sections 1, 3, 4, 201-205, 251, 256, 271, and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, and 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt. that the petition for reconsideration/clarification of the *UNE Remand Order* filed in CC Docket No. 96-98 by BellSouth Corporation and BellSouth Telecommunications, Inc. on February 17, 2000 IS GRANTED to the extent indicated herein and otherwise ARE DENIED.

835. IT IS FURTHER ORDERED, pursuant to sections 1, 3, 4, 201-205, 251, 256, 271, and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, and 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt. that the petitions for reconsideration of the *UNE Remand Order* filed in CC Docket Nos. 96-98, 95-185 by Rhythms Netconnections Inc. and Covad Communications Co. on January 21, 2000, @Link Networks, Inc., DSL.net, Inc. and MGC Communications, Inc., d/b/a Mpower Communications Corp. on February 17, 2000, McLeodUSA Telecommunications Services, Inc. and the petition for reconsideration of the *UNE Remand Order* filed in CC Docket No. 96-98 by RCN Telecom Services, Inc. on February 17, 2000 ARE DENIED.

836. IT IS FURTHER ORDERED, pursuant to sections 1, 3, 4, 201-205, 251, 256, 271, and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, and 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt. that the petition of the *UNE Remand Order* filed in CC Docket No. 96-98 by Competitive Telecommunications Association on November 26, 2001; and the petitions for reconsideration of the *UNE Remand Order* filed in CC Docket No. 96-98 by Intermedia Communications, Inc. and by MCI WorldCom, Inc. on February 17, 2000 ARE DENIED to the extent indicated herein and otherwise ARE DISMISSED AS MOOT.

837. IT IS FURTHER ORDERED, pursuant to sections 1, 3, 4, 201-205, 251, 256, 271, and 303(r) of the Communications Act, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 251, 252, 256, 271, and 303(r), and Section 706 of the Telecommunications Act of 1996, 47 U.S.C. § 157 nt. that the petition for clarification of the *UNE Remand Order* filed in CC Docket No. 96-98 by MCI WorldCom, Inc. on February 17, 2000; the petition for reconsideration of the *UNE Remand Order* filed in CC Docket No. 96-98 by the Competitive Telecommunications Association on February 17, 2000; the petition for reconsideration and clarification of the *UNE Remand Order* filed in CC Docket No. 96-98 by Bell Atlantic on February 17, 2000; and the petition for reconsideration and clarification of the *UNE Remand Order* filed in CC Docket No. 96-98 by AT&T Corp. on February 17, 2000 ARE GRANTED to the extent indicated herein and otherwise ARE DENIED or DISMISSED AS MOOT.

838. IT IS FURTHER ORDERED that the Public Notice, *Comments Sought on the Use of Unbundled Network Elements to Provide Exchange Access Service*, CC Docket No. 96-98, DA 01-169 (rel. Jan. 24, 2001); *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition*

Provisions of the Telecommunications Act of 1996, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, and Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, 16 FCC Rcd 2101 (2001); *Implementation of Local Competition Provisions of the Telecommunications Act of 1996*, Third Order on Reconsideration and Further Notice of Proposed Rulemaking, CC Docket Nos. 96-98 and 95-185, 12 FCC Rcd 12460 (1997); and *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, 15 FCC Rcd 3696 (1999) ARE TERMINATED.

839. IT IS FURTHER ORDERED, that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order and Order on Remand*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

840. IT IS FURTHER ORDERED, that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Further Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A—LIST OF COMMENTERS

Comments	*Abbreviation*
Aaron Wilson, Jr., Pennsylvania Public Utilities Commission	Pennsylvania Commissioner Wilson
Advanced Tel, Inc.	Advanced Tel
Alaska Communications Systems	ACS
Alcatel USA, Inc.	Alcatel
Allegiance Telecom, Inc.	Allegiance
Association for Local Telecommunications Services Cbeyond Communications, LLC DSLNET Communications, LLC El Paso Networks, LLC Focal Communications Corporation New Edge Network, Inc. Pac-West Telecomm, Inc. Paetec Communications, Inc. RCN Telecom Services, Inc. US LEC Corp.	ALTS *et al.*
Association of Communications Enterprises	ASCENT
AT&T Corp.	AT&T
AT&T Wireless Services, Inc.	ATTWS
BellSouth Corporation	BellSouth

Comments	*Abbreviation*
Business Telecom, Inc.	BTI
California Public Utilities Commission	California Commission
Catena Networks	Catena
Cellular Telecommunications & Internet Association	CTIA
Competitive Enterprise Institute	Competitive Enterprise Institute
Competitive Telecommunications Association	CompTel
Consumer Federation of America Texas Office of Public Utility Counsel Consumers Union Center for Digital Democracy	Consumer Federation *et al.*
Conversent Communications	Conversent
Corning, Inc.	Corning
Covad Communications Company	Covad
Dynegy Global Communications, Inc.	Dynegy
El Paso Networks, LLC CTC Communications Corp. ConEdison Communications, LLC	El Paso *et al.*

Comments	*Abbreviation*
Eschelon Telecom, Inc.	Eschelon
Fiber-to-the-Home Council	FTTH Council
Florida Public Service Commission	Florida Commission
General Communication Inc.	GCI
General Services Administration	GSA
Georgia Public Service Commission	Georgia Commission
High Tech Broadband Coalition	HTBC
Illinois Commerce Commission	Illinois Commission
Illuminet	Illuminet
Indiana Utility Regulatory Commission	Indiana Commission
Kansas Corporation Commission	Kansas Commission
Long Distance of Michigan, Inc.	LDMI
Louisiana Public Service Commission	Louisiana Commission
Maine CLEC Coalition	Maine CLEC Coalition
Massachusetts Department of Telecommunications and Energy	Massachusetts Department

Comments	*Abbreviation*
McLeodUSA Telecommunications Services	McLeodUSA
Michigan Public Service Commission	Michigan Commission
Missouri Public Service Commission	Missouri Commission
Moline Dispatch Publishing Company Competitive Communications Group	Moline and CCG
Mpower Communications Corp.	Mpower
National Association of Regulatory Utilities	NARUC
National Telecommunications Cooperative Association	NTCA
Navigator Telecommunications, LLC	Navigator
NewSouth Communications	NewSouth
New York State Department of Public Service	New York Department
Next Level Communications	Next Level
Nextel Communications, Inc.	Nextel
Norlight Telecommunications, Inc.	Norlight

Comments	*Abbreviation*
NuVox Inc. KMC Telecom, Inc. e.spire Communications, Inc. TDS Metrocom, Inc. Metromedia Fiber Network Services, Inc. SNiP LiNK, LLC	NuVox *et al.*
Oklahoma Corporation Commission	Oklahoma Commission
Openband of Virginia, LLC	Openband
Pennsylvania Office of the Consumer Advocate, Ohio Consumers Counsel New Hampshire Office of Consumer Advocate West Virginia Consumer Advocate Division Maryland Office of Peoples Counsel	Pennsylvania Office of the Consumer Advocate *et al.*
Pennsylvania Public Utilities Commission	Pennsylvania Commission
Progress & Freedom Foundation	Progress & Freedom Foundation
Progress Telecom Corporation	Progress Telecom
Public Utilities Commission of Ohio	Ohio Commission
Public Utilities Commission of Texas	Texas Commission

Comments	*Abbreviation*
Qwest Communications International Inc.	Qwest
Rural Independent Competitive Alliance	Rural Independent Competitive Alliance
SBC Telecommunications	SBC
Southwest Competitive Telecommunications Association	SWCTA
Sprint Corporation	Sprint
Supra Telecom	Supra
Talk America, Inc.	Talk America
Taqua, Inc.	Taqua
Telecommunications Industry Association	TIA
UNE Platform Coalition	UNE-P Coalition
United States Telecom Association	USTA
Verizon Telephone Companies	Verizon
VoiceStream Wireless Corporation	VoiceStream
WorldCom, Inc.	WorldCom
Z-Tel Communications	Z-Tel

Replies	*Abbreviation*
Access Integrated Networks, Inc.	Access Integrated Networks
Advanced Tel, Inc.	Advanced Tel
Alabama Public Service Commission	Alabama Commission
Alaska Communications Systems	ACS
Alcatel USA, Inc.	Alcatel
Allegiance Telecom, Inc.	Allegiance
Arch Wireless, Inc.	Arch Wireless
Association for Local Telecommunications Services Cbeyond Communications, LLC DSLNET Communications, LLC El Paso Networks, LLC Focal Communications Corporation New Edge Network, Inc. Pac-West Telecomm, Inc. Paetec Communications, Inc. RCN Telecom Services, Inc. US LEC Corp.	ALTS *et al.*
Association of Communications Enterprises	ASCENT
AT&T Corp.	AT&T
BellSouth Corporation	BellSouth

Replies	*Abbreviation*
BrahmaCom	BrahmaCom
Catena Networks, Inc.	Catena
CCG Consulting, Inc.	CCG
Choice One Communications Inc.	Choice One
Coalition of Competitive Fiber Providers	Coalition of Competitive Fiber Providers
Colorado Public Utilities Commission	Colorado Commission
Communications Workers of America	CWA
Competitive Telecommunications Association	CompTel
Consumer Federation of America, Texas Office of Public Utility Counsel Consumers Union Center for Digital Democracy Media Access Project	Consumer Federation *et al.*
Conversent Communications LLC	Conversent
Corning, Inc.	Corning
Covad Communications Company	Covad
CTC Communications Corp.	CTC

Replies	*Abbreviation*
Dobson Communications Corp.	Dobson
Earthlink, Inc.	Earthlink
El Paso Networks, LLC CTC Communications Corp.	El Paso and CTC
Fiber-to-the-Home Council	FTTH Council
Florida Public Service Commission	Florida Commission
General Communication Inc.	GCI
High Tech Broadband Coalition	HTBC
Hugh Carter Donahue, Ph.D.	Donahue
Illinois Commerce Commission	Illinois Commission
Information Technology Industry Council	ITIC
ITC^DeltaCom Communications, Inc.	ITC^DeltaCom
Kansas Corporation Commission	Kansas Commission
LSSi Corp.	LSSi
Michigan Public Service Commission	Michigan Commission
Minnesota Department of Commerce	Minnesota Department

Replies	*Abbreviation*
Missouri Public Service Commission	Missouri Commission
Mpower Communications Corp.	Mpower
National ALEC Association, Prepaid Communications Association	Nat'l ALEC and Prepaid Communications Ass'ns
National Association of Regulatory Utilities	NARUC
National Exchange Carrier Association	NECA
National Telecommunications Cooperative Association	NTCA
Nebraska Public Service Commission	Nebraska Commission
NewSouth Communications	NewSouth
New York State Office of the Attorney General	New York State Attorney General
Next Level Communications	Next Level
Nextel Communications	Nextel
NuVox Inc. KMC Telecom, Inc. TDS Metrocom, Inc. Core Communications, Inc. SNiP LiNK, LLC	NuVox *et al.*
Oregon Public Utilities Commission	Oregon Commission

Replies	*Abbreviation*
Pennsylvania Public Utilities Commission	Pennsylvania Commission
Pilgrim Telephone, Inc.	Pilgrim
Progress & Freedom Foundation	Progress & Freedom Foundation
Public Utilities Commission of Ohio	Ohio Commission
Qwest Communications International	Qwest
Regulatory Commission of Alaska	Alaska Commission
SBC Telecommunications	SBC
Southwest Competitive Telecommunications Association	SWCTA
Sprint Corporation	Sprint
Talk America, Inc.	Talk America
Telecommunications Industry Association	TIA
TeleTruth	TeleTruth
Texas Office of the Attorney General	Texas Attorney General
Texas Public Utilities Commission	Texas Commission
UNE Platform Coalition	UNE-P Coalition

Replies	*Abbreviation*
United States Telecom Association	USTA
Verizon Telephone Companies	Verizon
Virginia State Corporation Commission	Virginia Commission
Washington Utilities and Transportation Commission	Washington Commission
WorldCom, Inc.	WorldCom
XO Communications, Inc.	XO
Z-Tel Communications, Inc.	Z-Tel

APPENDIX B—FINAL RULES

Part 51 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 51—INTERCONNECTION

1. The authority citation for part 51 is revised to read as follows:

Authority: Sections 1-5, 7, 201-05, 207-09, 218, 225-27, 251-54, 256, 271, 303(r), 332, 48 Stat. 1070, as amended, 1077; 47 U.S.C. §§ 151-55, 157, 201-05, 207-09, 218, 225-27, 251-54, 256, 271, 303(r), 332, and section 706 of the Telecommunications Act of 1996, Pub. L. No. 104-104, February 8, 1996, 110 Stat. 153, as amended, Pub. L. No. 107-110, January 8, 2002, 115 Stat. 2093, 47 U.S.C. § 157 note, unless otherwise noted.

2. Section 51.5 is amended by adding six new definitions in alphabetical order and by revising the definition of "state commission" to read as follows:

§ 51.5 Terms and Definitions.

*****

Commingling. *Commingling* means the connecting, attaching, or otherwise linking of an unbundled network element, or a combination of unbundled network elements, to one or more facilities or services that a requesting telecommunications carrier has obtained at wholesale from an incumbent LEC, or the combining of an unbundled network element, or a combination of unbundled network elements, with one or more such facilities or services. *Commingle* means the act of commingling.

*****

Enhanced extended link. An *enhanced extended link* or *EEL* consists of a combination of an unbundled loop and unbundled dedicated transport, together with any facilities, equipment, or functions necessary to combine those network elements.

*****

Intermodal. The term intermodal refers to facilities or technologies other than those found in traditional telephone networks, but that are utilized to provide competing services. Intermodal facilities or technologies include, but are not limited to, traditional or new cable plant, wireless technologies, and power line technologies.

*****

Non-qualifying service. A *non-qualifying service* is a service that is not a qualifying service.

*****

Qualifying service. A *qualifying service* is a telecommunications service that competes with a telecommunications service that has been traditionally the exclusive or primary domain of incumbent LECs, including, but not limited to, local exchange service, such as plain old telephone service, and access services, such as digital subscriber line services and high-capacity circuits.

*****

State commission. A *state commission* means the commission, board, or official (by whatever name designated) which under the laws of any state has regulatory jurisdiction with respect to intrastate operations of carriers. As referenced in this part, this term may include the Commission if it assumes responsibility for a proceeding or matter, pursuant to section 252(e)(5) of the Act or § 51.320. This term shall also include any person or persons to whom the state commission has

delegated its authority under sections 251 and 252 of the Act and this part.

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Triennial Review Order. The *Triennial Review Order* means the Commission's Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 96-98, and 98-147.

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3. Section 51.301 is amended by revising paragraph (c)(8)(ii) to read as follows:

§ 51.301 Duty to negotiate.

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(c) ***

(8) ***

(ii) Refusal by an incumbent LEC to furnish cost data that would be relevant to setting rates if the parties were in arbitration.

4. Section 51.305 is amended by removing paragraph (a)(4), redesignating paragraph (a)(5) as paragraph (a)(4), and revising paragraph (a)(3) to read as follows:

§ 51.305 Interconnection.

(a) ***

(3) That is at a level of quality that is equal to that which the incumbent LEC provides itself, a subsidiary, an affiliate, or any other party. At a minimum, this requires an incumbent LEC to design interconnection facilities to meet the same technical criteria and service standards that are used within the incumbent LEC's network. This obligation is not limited to a consideration of service quality as perceived by end users, and includes, but is not limited to, service quality

as perceived by the requesting telecommunications carrier; and

*****

5. Section 51.309 is amended by revising paragraphs (a) and (b), and by adding paragraphs (d) through (g) to read as follows:

§ 51.309 Use of unbundled network elements.

(a) Except as provided in § 51.318, an incumbent LEC shall not impose limitations, restrictions, or requirements on requests for, or the use of, unbundled network elements for the service a requesting telecommunications carrier seeks to offer.

(b) A requesting telecommunications carrier may not access an unbundled network element for the sole purpose of providing non-qualifying services.

*****

(d) A requesting telecommunications carrier that accesses and uses an unbundled network element pursuant to section 251(c)(3) of the Act and this part to provide a qualifying service may use the same unbundled network element to provide non-qualifying services.

(e) Except as provided in § 51.318, an incumbent LEC shall permit a requesting telecommunications carrier to commingle an unbundled network element or a combination of unbundled network elements with wholesale services obtained from an incumbent LEC.

(f) Upon request, an incumbent LEC shall perform the functions necessary to commingle an unbundled network element or a combination of unbundled network elements with one or more facilities or services that a requesting telecommunications carrier has obtained at wholesale from an incumbent LEC.

(g) An incumbent LEC shall not deny access to an unbundled network element or a combination of unbundled network elements on the grounds that one or more of the elements:

(1) Is connected to, attached to, linked to, or combined with, a facility or service obtained from an incumbent LEC; or

(2) Shares part of the incumbent LEC's network with access services or inputs for non-qualifying services.

6. Section 51.311 is amended by revising paragraphs (a) and (b), removing paragraph (c), redesignating paragraphs (d) and (e) as paragraphs (c) and (d) to read as follows:

§ 51.311 Nondiscriminatory access to unbundled network elements.

(a) The quality of an unbundled network element, as well as the quality of the access to the unbundled network element, that an incumbent LEC provides to a requesting telecommunications carrier shall be the same for all telecommunications carriers requesting access to that network element.

(b) To the extent technically feasible, the quality of an unbundled network element, as well as the quality of the access to such unbundled network element, that an incumbent LEC provides to a requesting telecommunications carrier shall be at least equal in quality to that which the incumbent LEC provides to itself. If an incumbent LEC fails to meet this requirement, the incumbent LEC must prove to the state commission that it is not technically feasible to provide the requested unbundled network element, or to provide access to the requested unbundled network element, at a level of quality that is equal to that which the incumbent LEC provides to itself.

*****

7. Section 51.315 is amended by revising paragraphs (c) and (f) to read as follows:

§ 51.315 Combination of unbundled network elements.

*****

(c) Upon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements in any manner, even if those elements are not ordinarily combined in the incumbent LEC's network, provided that such combination:

(1) Is technically feasible; and

(2) Would not undermine the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.

*****

(f) An incumbent LEC that denies a request to combine unbundled network elements pursuant to paragraph (c)(2) of this section must demonstrate to the state commission that the requested combination would undermine the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.

8. Section 51.316 is added to read as follows:

§ 51.316 Conversion of unbundled network elements and services.

(a) Upon request, an incumbent LEC shall convert a wholesale service, or group of wholesale services, to the equivalent unbundled network element, or combination of unbundled network elements, that is available to the requesting telecommunications carrier under section 251(c)(3) of the Act and this part.

(b) An incumbent LEC shall perform any conversion from a wholesale service or group of wholesale services to an unbundled network element or combination of unbundled

network elements without adversely affecting the service quality perceived by the requesting telecommunications carrier's end-user customer.

(c) Except as agreed to by the parties, an incumbent LEC shall not impose any untariffed termination charges, or any disconnect fees, re-connect fees, or charges associated with establishing a service for the first time, in connection with any conversion between a wholesale service or group of wholesale services and an unbundled network element or combination of unbundled network elements.

9. Section 51.317 is revised to read as follows:

§ 51.317 Standards for requiring the unbundling of network elements.

Proprietary network elements. A network element shall be considered to be proprietary if an incumbent LEC can demonstrate that it has invested resources to develop proprietary information or functionalities that are protected by patent, copyright or trade secret law. The Commission shall undertake the following analysis to determine whether a proprietary network element should be made available for purposes of section 251(c)(3) of the Act:

(a) Determine whether access to the proprietary network element is "necessary." A network element is "necessary" if, taking into consideration the availability of alternative elements outside the incumbent LEC's network, including self-provisioning by a requesting telecommunications carrier or acquiring an alternative from a third-party supplier, lack of access to the network element precludes a requesting telecommunications carrier from providing the services that it seeks to offer. If access is "necessary," the Commission may require the unbundling of such proprietary network element.

(b) In the event that such access is not "necessary," the Commission may require unbundling if it is determined that:

(1) The incumbent LEC has implemented only a minor modification to the network element in order to qualify for proprietary treatment;

(2) The information or functionality that is proprietary in nature does not differentiate the incumbent LEC's services from the requesting telecommunications carrier's services; or

(3) Lack of access to such element would jeopardize the goals of the Act.

10. Section 51.318 is added to read as follows:

§ 51.318 Eligibility criteria for access to certain unbundled network elements.

(a) Except as provided in paragraph (b) of this section, an incumbent LEC shall provide access to unbundled network elements and combinations of unbundled network elements without regard to whether the requesting telecommunications carrier seeks access to the elements to establish a new circuit or to convert an existing circuit from a service to unbundled network elements.

(b) An incumbent LEC need not provide access to (1) an unbundled DS1 loop in combination, or commingled, with a dedicated DS1 transport or dedicated DS3 transport facility or service, or to an unbundled DS3 loop in combination, or commingled, with a dedicated DS3 transport facility or service, or (2) an unbundled dedicated DS1 transport facility in combination, or commingled, with an unbundled DS1 loop or a DS1 channel termination service, or to an unbundled dedicated DS3 transport facility in combination, or commingled, with an unbundled DS1 loop or a DS1 channel termination service, or to an unbundled DS3 loop or a DS3 channel termination service, unless the requesting

telecommunications carrier certifies that all of the following conditions are met:

(1) The requesting telecommunications carrier has received state certification to provide local voice service in the area being served or, in the absence of a state certification requirement, has complied with registration, tariffing, filing fee, or other regulatory requirements applicable to the provision of local voice service in that area.

(2) The following criteria are satisfied for each combined circuit, including each DS1 circuit, each DS1 enhanced extended link, and each DS1-equivalent circuit on a DS3 enhanced extended link:

(i) Each circuit to be provided to each customer will be assigned a local number prior to the provision of service over that circuit;

(ii) Each DS1-equivalent circuit on a DS3 enhanced extended link must have its own local number assignment, so that each DS3 must have at least 28 local voice numbers assigned to it;

(iii) Each circuit to be provided to each customer will have 911 or E911 capability prior to the provision of service over that circuit;

(iv) Each circuit to be provided to each customer will terminate in a collocation arrangement that meets the requirements of paragraph (c) of this section;

(v) Each circuit to be provided to each customer will be served by an interconnection trunk that meets the requirements of paragraph (d) of this section;

(vi) For each 24 DS1 enhanced extended links or other facilities having equivalent capacity, the

requesting telecommunications carrier will have at least one active DS1 local service interconnection trunk that meets the requirements of paragraph (d) of this section; and

(vii) Each circuit to be provided to each customer will be served by a switch capable of switching local voice traffic.

(c) A collocation arrangement meets the requirements of this paragraph if it is:

(1) Established pursuant to section 251(c)(6) of the Act and located at an incumbent LEC premises within the same LATA as the customer's premises, when the incumbent LEC is not the collocator; and

(2) Located at a third party's premises within the same LATA as the customer's premises, when the incumbent LEC is the collocator.

(d) An interconnection trunk meets the requirements of this paragraph if the requesting telecommunications carrier will transmit the calling party's number in connection with calls exchanged over the trunk.

11. Section 51.319 is revised to read as follows:

§ 51.319 Specific unbundling requirements.

(a) *Local loops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to the local loop on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraphs (a)(1) through (a)(9) of this section. The local loop network element is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end-user customer premises. This element includes all features, functions, and capabilities of such transmission facility, including the network interface device. It also

includes all electronics, optronics, and intermediate devices (including repeaters and load coils) used to establish the transmission path to the end-user customer premises as well as any inside wire owned or controlled by the incumbent LEC that is part of that transmission path.

(1) *Copper loops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to the copper loop on an unbundled basis. A copper loop is a stand-alone local loop comprised entirely of copper wire or cable. Copper loops include two-wire and four-wire analog voice-grade copper loops, digital copper loops (*e.g.*, DS0s and integrated services digital network lines), as well as two-wire and four-wire copper loops conditioned to transmit the digital signals needed to provide digital subscriber line services, regardless of whether the copper loops are in service or held as spares. The copper loop includes attached electronics using time division multiplexing technology, but does not include packet switching capabilities as defined in paragraph (a)(2)(i) of this section. The availability of DS1 and DS3 copper loops is subject to the requirements of paragraphs (a)(4) and (a)(5) of this section.

(i) *Line sharing.* Beginning on the effective date of the Commission's *Triennial Review Order*, the high frequency portion of a copper loop shall no longer be required to be provided as an unbundled network element, subject to the transitional line sharing conditions in paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of this section. Line sharing is the process by which a requesting telecommunications carrier provides digital subscriber line service over the same copper loop that the incumbent LEC uses to provide voice service, with the incumbent LEC using the low frequency portion of the loop and the requesting telecommunications carrier using the

high frequency portion of the loop. The high frequency portion of the loop consists of the frequency range on the copper loop above the range that carries analog circuit-switched voice transmissions. This portion of the loop includes the features, functions, and capabilities of the loop that are used to establish a complete transmission path on the high frequency range between the incumbent LEC's distribution frame (or its equivalent) in its central office and the demarcation point at the end-user customer premises, and includes the high frequency portion of any inside wire owned or controlled by the incumbent LEC.

(A) *Line sharing customers before the effective date of the Commission's Triennial Review Order.* An incumbent LEC shall provide a requesting telecommunications carrier with the ability to engage in line sharing over a copper loop where, prior to the effective date of the Commission's *Triennial Review Order*, the requesting telecommunications carrier began providing digital subscriber line service to a particular end-user customer and has not ceased providing digital subscriber line service to that customer. Until such end-user customer cancels or otherwise discontinues its subscription to the digital subscriber line service of the requesting telecommunications carrier, or its successor or assign, an incumbent LEC shall continue to provide access to the high frequency portion of the loop at the same rate that the incumbent LEC charged for such access prior to the effective date of the Commission's *Triennial Review Order*.

(B) *Line sharing customers on or after the effective date of the Commission's Triennial*

Review Order. An incumbent LEC shall provide a requesting telecommunications carrier with the ability to engage in line sharing over a copper loop, between the effective date of the Commission's *Triennial Review Order* and three years after that effective date, where the requesting telecommunications carrier began providing digital subscriber line service to a particular end-user customer on or before the date one year after that effective date. Beginning three years after the effective date of the Commission's *Triennial Review Order*, the incumbent LEC is no longer required to provide a requesting telecommunications carrier with the ability to engage in line sharing for this end-user customer or any new end-user customer. Between the effective date of the Commission's *Triennial Review Order* and three years after that effective date, an incumbent LEC shall provide a requesting telecommunications carrier with access to the high frequency portion of a copper loop in order to serve line sharing customers obtained between the effective date of the Commission's *Triennial Review Order* and one year after that effective date in the following manner:

> (*1*) During the first year following the effective date of the Commission's *Triennial Review Order*, the incumbent LEC shall provide access to the high frequency portion of a copper loop at 25 percent of the state-approved monthly recurring rate, or 25 percent of the monthly recurring rate set forth in the incumbent LEC's and requesting telecommunications carrier's interconnection agreement, for

access to a copper loop in effect on that date.

(*2*) Beginning one year plus one day after the effective date of the Commission's *Triennial Review Order* until two years after that effective date, the incumbent LEC shall provide access to the high frequency portion of a copper loop at 50 percent of the state-approved monthly recurring rate, or 50 percent of the monthly recurring rate set forth in the incumbent LEC's and requesting telecommunications carrier's interconnection agreement, for access to a copper loop in effect on the effective date of the Commission's *Triennial Review Order*.

(*3*) Beginning two years plus one day after effective date of the Commission's *Triennial Review Order* until three years after that effective date, the incumbent LEC shall provide access to the high frequency portion of a copper loop at 75 percent of the state-approved monthly recurring rate, or 75 percent of the monthly recurring rate set forth in the incumbent LEC's and requesting telecommunications carrier's interconnection agreement, for access to a copper loop in effect on the effective date of the Commission's *Triennial Review Order*.

(ii) *Line splitting*. An incumbent LEC shall provide a requesting telecommunications carrier that obtains an unbundled copper loop from the incumbent LEC with the ability to engage in line splitting arrangements with another competitive LEC using a splitter collocated at the central office

where the loop terminates into a distribution frame or its equivalent. Line splitting is the process in which one competitive LEC provides narrowband voice service over the low frequency portion of a copper loop and a second competitive LEC provides digital subscriber line service over the high frequency portion of that same loop.

(A) An incumbent LEC's obligation, under paragraph (a)(1)(ii) of this section, to provide a requesting telecommunications carrier with the ability to engage in line splitting applies regardless of whether the carrier providing voice service provides its own switching or obtains local circuit switching as an unbundled network element pursuant to paragraph (d) of this section.

(B) An incumbent LEC must make all necessary network modifications, including providing nondiscriminatory access to operations support systems necessary for pre-ordering, ordering, provisioning, maintenance and repair, and billing for loops used in line splitting arrangements.

(iii) *Line conditioning.* The incumbent LEC shall condition a copper loop at the request of the carrier seeking access to a copper loop under paragraph (a)(1) of this section, the high frequency portion of a copper loop under paragraph (a)(1)(i) of this section, or a copper subloop under paragraph (b) of this section to ensure that the copper loop or copper subloop is suitable for providing digital subscriber line services, including those provided over the high frequency portion of the copper loop or copper subloop, whether or not the incumbent LEC offers advanced services to the end-user customer on that copper loop or copper subloop. If the incumbent

LEC seeks compensation from the requesting telecommunications carrier for line conditioning, the requesting telecommunications carrier has the option of refusing, in whole or in part, to have the line conditioned; and a requesting telecommunications carrier's refusal of some or all aspects of line conditioning will not diminish any right it may have, under paragraphs (a) and (b) of this section, to access the copper loop, the high frequency portion of the copper loop, or the copper subloop.

(A) Line conditioning is defined as the removal from a copper loop or copper subloop of any device that could diminish the capability of the loop or subloop to deliver high-speed switched wireline telecommunications capability, including digital subscriber line service. Such devices include, but are not limited to, bridge taps, load coils, low pass filters, and range extenders.

(B) Incumbent LECs shall recover the costs of line conditioning from the requesting telecommunications carrier in accordance with the Commission's forward-looking pricing principles promulgated pursuant to section 252(d)(1) of the Act and in compliance with rules governing nonrecurring costs in § 51.507(e).

(C) Insofar as it is technically feasible, the incumbent LEC shall test and report troubles for all the features, functions, and capabilities of conditioned copper lines, and may not restrict its testing to voice transmission only.

(D) Where the requesting telecommunications carrier is seeking access to the high frequency portion of a copper loop or copper subloop pursuant to paragraphs (a) or (b) of this section

and the incumbent LEC claims that conditioning that loop or subloop will significantly degrade, as defined in § 51.233, the voiceband services that the incumbent LEC is currently providing over that loop or subloop, the incumbent LEC must either:

(*1*) Locate another copper loop or copper subloop that has been or can be conditioned, migrate the incumbent LEC's voiceband service to that loop or subloop, and provide the requesting telecommunications carrier with access to the high frequency portion of that alternative loop or subloop; or

(*2*) Make a showing to the state commission that the original copper loop or copper subloop cannot be conditioned without significantly degrading voiceband services on that loop or subloop, as defined in § 51.233, and that there is no adjacent or alternative copper loop or copper subloop available that can be conditioned or to which the end-user customer's voiceband service can be moved to enable line sharing.

(E) If, after evaluating the incumbent LEC's showing under paragraph (a)(1)(iii)(D)(*2*) of this section, the state commission concludes that a copper loop or copper subloop cannot be conditioned without significantly degrading the voiceband service, the incumbent LEC cannot then or subsequently condition that loop or subloop to provide advanced services to its own customers without first making available to any requesting telecommunications carrier the high

frequency portion of the newly conditioned loop or subloop.

(iv) *Maintenance, repair, and testing.* (A) An incumbent LEC shall provide, on a nondiscriminatory basis, physical loop test access points to a requesting telecommunications carrier at the splitter, through a cross-connection to the requesting telecommunications carrier's collocation space, or through a standardized interface, such as an intermediate distribution frame or a test access server, for the purpose of testing, maintaining, and repairing copper loops and copper subloops.

(B) An incumbent LEC seeking to utilize an alternative physical access methodology may request approval to do so from the state commission, but must show that the proposed alternative method is reasonable and nondiscriminatory, and will not disadvantage a requesting telecommunications carrier's ability to perform loop or service testing, maintenance, or repair.

(v) *Control of the loop and splitter functionality.* In situations where a requesting telecommunications carrier is obtaining access to the high frequency portion of a copper loop either through a line sharing or line splitting arrangement, the incumbent LEC may maintain control over the loop and splitter equipment and functions, and shall provide to the requesting telecommunications carrier loop and splitter functionality that is compatible with any transmission technology that the requesting telecommunications carrier seeks to deploy using the high frequency portion of the loop, as defined in paragraph (a)(1)(i) of this section, provided that such transmission technology is presumed to be deployable pursuant to § 51.230.

(2) *Hybrid loops.* A hybrid loop is a local loop composed of both fiber optic cable, usually in the feeder plant, and copper wire or cable, usually in the distribution plant.

(i) *Packet switching facilities, features, functions, and capabilities.* An incumbent LEC is not required to provide unbundled access to the packet switched features, functions and capabilities of its hybrid loops. Packet switching capability is the routing or forwarding of packets, frames, cells, or other data units based on address or other routing information contained in the packets, frames, cells or other data units, and the functions that are performed by the digital subscriber line access multiplexers, including but not limited to the ability to terminate an end-user customer's copper loop (which includes both a low-band voice channel and a high-band data channel, or solely a data channel); the ability to forward the voice channels, if present, to a circuit switch or multiple circuit switches; the ability to extract data units from the data channels on the loops; and the ability to combine data units from multiple loops onto one or more trunks connecting to a packet switch or packet switches.

(ii) *Broadband services.* When a requesting telecommunications carrier seeks access to a hybrid loop for the provision of broadband services, an incumbent LEC shall provide the requesting telecommunications carrier with nondiscriminatory access to the time division multiplexing features, functions, and capabilities of that hybrid loop, including DS1 or DS3 capacity (where impairment has been found to exist), on an unbundled basis to establish a complete transmission path between the incumbent LEC's central office and an end user's customer premises. This access shall include

access to all features, functions, and capabilities of the hybrid loop that are not used to transmit packetized information.

(iii) *Narrowband services.* When a requesting telecommunications carrier seeks access to a hybrid loop for the provision of narrowband services, the incumbent LEC may either:

(A) Provide nondiscriminatory access, on an unbundled basis, to an entire hybrid loop capable of voice-grade service (i.e., equivalent to DS0 capacity), using time division multiplexing technology; or

(B) Provide nondiscriminatory access to a spare home-run copper loop serving that customer on an unbundled basis.

(3) *Fiber-to-the-home loops.* A fiber-to-the-home loop is a local loop consisting entirely of fiber optic cable, whether dark or lit, and serving an end user's customer premises.

(i) *New builds.* An incumbent LEC is not required to provide nondiscriminatory access to a fiber-to-the-home loop on an unbundled basis when the incumbent LEC deploys such a loop to an end user's customer premises that previously has not been served by any loop facility.

(ii) *Overbuilds.* An incumbent LEC is not required to provide nondiscriminatory access to a fiber-to-the-home loop on an unbundled basis when the incumbent LEC has deployed such a loop parallel to, or in replacement of, an existing copper loop facility, except that:

(A) The incumbent LEC must maintain the existing copper loop connected to the particular customer premises after deploying the fiber-to-

the-home loop and provide nondiscriminatory access to that copper loop on an unbundled basis unless the incumbent LEC retires the copper loop pursuant to paragraph (a)(3)(iii) of this section.

(B) An incumbent LEC that maintains the existing copper loop pursuant to paragraph (a)(3)(ii)(A) of this section need not incur any expenses to ensure that the existing copper loop remains capable of transmitting signals prior to receiving a request for access pursuant to that paragraph, in which case the incumbent LEC shall restore the copper loop to serviceable condition upon request.

(C) An incumbent LEC that retires the copper loop pursuant to paragraph (a)(3)(iii) of this section shall provide nondiscriminatory access to a 64 kilobits per second transmission path capable of voice grade service over the fiber-to-the-home loop on an unbundled basis.

(iii) *Retirement of copper loops or copper subloops.* Prior to retiring any copper loop or copper subloop that has been replaced with a fiber-to-the-home loop, an incumbent LEC must comply with:

(A) The network disclosure requirements set forth in section 251(c)(5) of the Act and in § 51.325 through § 51.335; and

(B) Any applicable state requirements.

(4) *DS1 loops.* (i) An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to a DS1 loop on an unbundled basis except where the state commission has found, through application of the competitive wholesale facilities trigger

in paragraph (a)(4)(ii) of this section, that requesting telecommunications carriers are not impaired without access to a DS1 loop at a specific customer location. A DS1 loop is a digital local loop having a total digital signal speed of 1.544 megabytes per second. DS1 loops include, but are not limited to, two-wire and four-wire copper loops capable of providing high-bit rate digital subscriber line services, including T1 services.

(ii) *Competitive wholesale facilities trigger for DS1 loops.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to a DS1 loop at a specific customer location where two or more competing providers not affiliated with each other or with the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each satisfy the conditions in paragraphs (a)(4)(ii)(A) and (a)(4)(ii)(B) of this section:

(A) The competing provider has deployed its own DS1 facilities, and offers a DS1 loop over its own facilities on a widely available wholesale basis to other carriers desiring to serve customers at that location. For purposes of this paragraph, the competing provider's DS1 facilities may use dark fiber facilities that the competing provider has obtained on an unbundled, leased, or purchased basis if it has attached its own optronics to activate the fiber.

(B) The competing provider has access to the entire customer location, including each individual unit within that location.

(5) *DS3 loops.* Subject to the cap in paragraph (a)(5)(iii), an incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory

access to a DS3 loop on an unbundled basis except where the state commission has found, through application of either paragraph (a)(5)(i) of this section or the potential deployment analysis in paragraph (a)(5)(ii) of this section, that requesting telecommunications carriers are not impaired without access to a DS3 loop at a specific customer location. A DS3 loop is a digital local loop having a total digital signal speed of 44.736 megabytes per second.

(i) *Triggers for DS3 loops.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to unbundled DS3 loops at a specific customer location where two or more competing providers not affiliated with each other or with the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, satisfy either paragraph (a)(5)(i)(A) or paragraph (a)(5)(i)(B) of this section:

(A) *Self-provisioning trigger for DS3 loops.* To satisfy this trigger, a state commission must find that each competing provider has either deployed its own DS3 facilities at that specific customer location and is serving customers via those facilities at that location, or has deployed DS3 facilities by attaching its own optronics to activate dark fiber transmission facilities obtained under a long-term indefeasible right of use and is serving customers via those facilities at that location.

(B) *Competitive wholesale facilities trigger for DS3 loops.* To satisfy this trigger, a state commission must find that each competing provider satisfies the conditions in paragraphs (a)(5)(i)(B)(*1*) and (a)(5)(i)(B)(*2*) of this section.

(*1*) The competing provider has deployed its own DS3 facilities, and offers a DS3 loop over its own facilities on a widely available wholesale basis to other competing providers seeking to serve customers at the specific customer location. For purposes of this paragraph, the competing provider's DS3 facilities may use dark fiber facilities that the competing provider has obtained on an unbundled, leased, or purchased basis if it has attached its own optronics to activate the fiber.

(*2*) The competing provider has access to the entire customer location, including each individual unit within that location.

(ii) *Potential deployment of DS3 loops.* Where neither trigger in paragraph (a)(5)(i) of this section is satisfied, a state commission shall consider whether other evidence shows that a requesting telecommunications carrier is not impaired without access to an unbundled DS3 loop at a specific customer location. To make this determination, a state must consider the following factors: evidence of alternative loop deployment at that location; local engineering costs of building and utilizing transmission facilities; the cost of underground or aerial laying of fiber or copper; the cost of equipment needed for transmission; installation and other necessary costs involved in setting up service; local topography such as hills and rivers; availability of reasonable access to rights-of-way; building access restrictions/costs; and availability/ feasibility of similar quality/reliability alternative transmission technologies at that particular location.

(iii) *Cap on unbundled DS3 circuits.* A requesting telecommunications carrier may obtain a maximum of two unbundled DS3 loops for any single customer location where DS3 loops are available as unbundled loops.

(6) *Dark fiber loops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to a dark fiber loop on an unbundled basis except where a state commission has found, through application of the self-provisioning trigger in paragraph (a)(6)(i) of this section or the potential deployment analysis in paragraph (a)(6)(ii) of this section, that requesting telecommunications carriers are not impaired without access to a dark fiber loop at a specific customer location. Dark fiber is fiber within an existing fiber optic cable that has not yet been activated through optronics to render it capable of carrying communications services.

(i) *Self-provisioning trigger for dark fiber loops.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to a dark fiber loop at a specific customer location where two or more competing providers not affiliated with each other or with the incumbent LEC, have deployed their own dark fiber facilities at that specific customer location. For purposes of making this determination, a competing provider that has obtained those dark fiber facilities under a long-term indefeasible right of use shall be considered a competing provider with its own dark fiber facilities. Dark fiber purchased on an unbundled basis from the incumbent LEC shall not be considered under this paragraph.

(ii) *Potential deployment of dark fiber loops.* Where the trigger in paragraph (a)(6)(i) of this section is not satisfied, a state commission shall

consider whether other evidence shows that a requesting telecommunications carrier is not impaired without access to an unbundled dark fiber loop at a specific customer location. To make this determination, a state must consider the following factors: evidence of alternative loop deployment at that location; local engineering costs of building and utilizing transmission facilities; the cost of underground or aerial laying of fiber; the cost of equipment needed for transmission; installation and other necessary costs involved in setting up service; local topography such as hills and rivers; availability of reasonable access to rights-of-way; building access restrictions/costs; and availability/ feasibility of similar quality/reliability alternative transmission technologies at that particular location.

(7) *State commission proceedings.* A state commission shall complete the proceedings necessary to satisfy the requirements in paragraphs (a)(4), (a)(5), and (a)(6) of this section in accordance with paragraphs (a)(7)(i) and (a)(7)(ii) of this section.

(i) *Initial review.* A state commission shall complete any initial review applying the triggers and criteria in paragraphs (a)(4), (a)(5), and (a)(6) of this section within nine months from the effective date of the Commission's Triennial Review Order.

(ii) *Continuing review.* A state commission shall complete any subsequent review applying these triggers and criteria within six months of the filing of a petition or other pleading to conduct such a review.

(8) *Routine network modifications.* (i) An incumbent LEC shall make all routine network modifications to

unbundled loop facilities used by requesting telecommunications carriers where the requested loop facility has already been constructed. An incumbent LEC shall perform these routine network modifications to unbundled loop facilities in a nondiscriminatory fashion, without regard to whether the loop facility being accessed was constructed on behalf, or in accordance with the specifications, of any carrier.

(ii) A routine network modification is an activity that the incumbent LEC regularly undertakes for its own customers. Routine network modifications include, but are not limited to, rearranging or splicing of cable; adding an equipment case; adding a doubler or repeater; adding a smart jack; installing a repeater shelf; adding a line card; deploying a new multiplexer or reconfiguring an existing multiplexer; and attaching electronic and other equipment that the incumbent LEC ordinarily attaches to a DS1 loop to activate such loop for its own customer. They also include activities needed to enable a requesting telecommunications carrier to obtain access to a dark fiber loop. Routine network modifications may entail activities such as accessing manholes, deploying bucket trucks to reach aerial cable, and installing equipment casings. Routine network modifications do not include the construction of a new loop, or the installation of new aerial or buried cable for a requesting telecommunications carrier.

(9) *Engineering policies, practices, and procedures.* An incumbent LEC shall not engineer the transmission capabilities of its network in a manner, or engage in any policy, practice, or procedure, that disrupts or degrades access to a local loop or subloop, including the time division multiplexing-based features, functions, and capabilities of a hybrid loop, for which a requesting

telecommunications carrier may obtain or has obtained access pursuant to paragraph (a) of this section.

(b) *Subloops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to subloops on an unbundled basis in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraph (b) of this section.

(1) *Copper subloops.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to a copper subloop on an unbundled basis. A copper subloop is a portion of a copper loop, or hybrid loop, comprised entirely of copper wire or copper cable that acts as a transmission facility between any point of technically feasible access in an incumbent LEC's outside plant, including inside wire owned or controlled by the incumbent LEC, and the end-user customer premises. A copper subloop includes all intermediate devices (including repeaters and load coils) used to establish a transmission path between a point of technically feasible access and the demarcation point at the end-user customer premises, and includes the features, functions, and capabilities of the copper loop. Copper subloops include two-wire and four-wire analog voice-grade subloops as well as two-wire and four-wire subloops conditioned to transmit the digital signals needed to provide digital subscriber line services, regardless of whether the subloops are in service or held as spares.

(i) *Point of technically feasible access.* A point of technically feasible access is any point in the incumbent LEC's outside plant where a technician can access the copper wire within a cable without removing a splice case. Such points include, but are not limited to, a pole or pedestal, the serving area interface, the network interface device, the minimum point of entry, any remote terminal, and

the feeder/distribution interface. An incumbent LEC shall, upon a site-specific request, provide access to a copper subloop at a splice near a remote terminal. The incumbent LEC shall be compensated for providing this access in accordance with §§ 51.501 through 51.515.

(ii) *Rules for collocation.* Access to the copper subloop is subject to the Commission's collocation rules at §§ 51.321 and 51.323.

(2) *Subloops for access to multiunit premises wiring.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to the subloop for access to multiunit premises wiring on an unbundled basis regardless of the capacity level or type of loop that the requesting telecommunications carrier seeks to provision for its customer. The subloop for access to multiunit premises wiring is defined as any portion of the loop that it is technically feasible to access at a terminal in the incumbent LEC's outside plant at or near a multiunit premises. One category of this subloop is inside wire, which is defined for purposes of this section as all loop plant owned or controlled by the incumbent LEC at a multiunit customer premises between the minimum point of entry as defined in § 68.105 of this chapter and the point of demarcation of the incumbent LEC's network as defined in § 68.3 of this chapter.

(i) *Point of technically feasible access.* A point of technically feasible access is any point in the incumbent LEC's outside plant at or near a multiunit premises where a technician can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within to access the wiring in the multiunit premises. Such points include, but are not limited to, a pole or pedestal, the network interface device, the

minimum point of entry, the single point of interconnection, and the feeder/distribution interface.

(ii) *Single point of interconnection.* Upon notification by a requesting telecommunications carrier that it requests interconnection at a multiunit premises where the incumbent LEC owns, controls, or leases wiring, the incumbent LEC shall provide a single point of interconnection that is suitable for use by multiple carriers. This obligation is in addition to the incumbent LEC's obligations, under paragraph (b)(2) of this section, to provide nondiscriminatory access to a subloop for access to multiunit premises wiring, including any inside wire, at any technically feasible point. If the parties are unable to negotiate rates, terms, and conditions under which the incumbent LEC will provide this single point of interconnection, then any issues in dispute regarding this obligation shall be resolved in state proceedings under section 252 of the Act.

(3) *Other subloop provisions.* (i) *Technical feasibility.* If parties are unable to reach agreement through voluntary negotiations as to whether it is technically feasible, or whether sufficient space is available, to unbundle a copper subloop or subloop for access to multiunit premises wiring at the point where a telecommunications carrier requests, the incumbent LEC shall have the burden of demonstrating to the state commission, in state proceedings under section 252 of the Act, that there is not sufficient space available, or that it is not technically feasible to unbundle the subloop at the point requested.

(ii) *Best practices.* Once one state commission has determined that it is technically feasible to unbundle subloops at a designated point, an incumbent LEC in any state shall have the burden of demonstrating to the state commission, in state

proceedings under section 252 of the Act, that it is not technically feasible, or that sufficient space is not available, to unbundle its own loops at such a point.

(c) *Network interface device.* Apart from its obligation to provide the network interface device functionality as part of an unbundled loop or subloop, an incumbent LEC also shall provide nondiscriminatory access to the network interface device on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part. The network interface device element is a stand-alone network element and is defined as any means of interconnection of customer premises wiring to the incumbent LEC's distribution plant, such as a cross-connect device used for that purpose. An incumbent LEC shall permit a requesting telecommunications carrier to connect its own loop facilities to on-premises wiring through the incumbent LEC's network interface device, or at any other technically feasible point.

(d) *Local circuit switching.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to local circuit switching, including tandem switching, on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraph (d) of this section.

(1) *Definition.* Local circuit switching is defined as follows:

(i) Local circuit switching encompasses all line-side and trunk-side facilities, plus the features, functions, and capabilities of the switch. The features, functions, and capabilities of the switch shall include the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks.

(ii) Local circuit switching includes all vertical features that the switch is capable of providing,

including custom calling, custom local area signaling services features, and Centrex, as well as any technically feasible customized routing functions.

(2) *DS0 capacity (i.e., mass market) determinations.* An incumbent LEC shall provide access to local circuit switching on an unbundled basis to a requesting telecommunications carrier serving end users using DS0 capacity loops except where the state commission has found, in accordance with the conditions set forth in paragraph (d)(2) of this section, that requesting telecommunications carriers are not impaired in a particular market, or where the state commission has found that all such impairment would be cured by implementation of transitional unbundled local circuit switching in a given market and has implemented such transitional access as set forth in paragraph (d)(2)(iii)(C) of this section.

(i) *Market definition.* A state commission shall define the markets in which it will evaluate impairment by determining the relevant geographic area to include in each market. In defining markets, a state commission shall take into consideration the locations of mass market customers actually being served (if any) by competitors, the variation in factors affecting competitors' ability to serve each group of customers, and competitors' ability to target and serve specific markets profitably and efficiently using currently available technologies. A state commission shall not define the relevant geographic area as the entire state.

(ii) *Batch cut process.* In each of the markets that the state commission defines pursuant to paragraph (d)(2)(i) of this section, the state commission shall either establish an incumbent LEC batch cut

process as set forth in paragraph (d)(2)(ii)(A) of this section or issue detailed findings explaining why such a batch process is unnecessary, as set forth in paragraph (d)(2)(ii)(B) of this section. A batch cut process is defined as a process by which the incumbent LEC simultaneously migrates two or more loops from one carrier's local circuit switch to another carrier's local circuit switch, giving rise to operational and economic efficiencies not available when migrating loops from one carrier's local circuit switch to another carrier's local circuit switch on a line-by-line basis.

(A) A state commission shall establish an incumbent LEC batch cut process for use in migrating lines served by one carrier's local circuit switch to lines served by another carrier's local circuit switch in each of the markets the state commission has defined pursuant to paragraph (d)(2)(i) of this section. In establishing the incumbent LEC batch cut process:

(*1*) A state commission shall first determine the appropriate volume of loops that should be included in the "batch."

(*2*) A state commission shall adopt specific processes to be employed when performing a batch cut, taking into account the incumbent LEC's particular network design and cut over practices.

(*3*) A state commission shall evaluate whether the incumbent LEC is capable of migrating multiple lines served using unbundled local circuit switching to switches operated by a carrier other than the incumbent LEC for any requesting

telecommunications carrier in a timely manner, and may require that incumbent LECs comply with an average completion interval metric for provision of high volumes of loops.

(*4*) A state commission shall adopt rates for the batch cut activities it approves in accordance with the Commission's pricing rules for unbundled network elements. These rates shall reflect the efficiencies associated with batched migration of loops to a requesting telecommunications carrier's switch, either through a reduced per-line rate or through volume discounts as appropriate.

(B) If a state commission concludes that the absence of a batch cut migration process is not impairing requesting telecommunications carriers' ability to serve end users using DS0 loops in the mass market without access to local circuit switching on an unbundled basis, that conclusion will render the creation of such a process unnecessary. In such cases, the state commission shall issue detailed findings regarding the volume of unbundled loop migrations that could be expected if requesting telecommunications carriers were no longer entitled to local circuit switching on an unbundled basis, the ability of the incumbent LEC to meet that demand in a timely and efficient manner using its existing hot cut process, and the non-recurring costs associated with that hot cut process. The state commission further shall explain why these findings indicate that the absence of a batch cut process does not give rise to impairment in the market at issue.

(iii) *State commission analysis.* To determine whether requesting telecommunications carriers are impaired without access to local circuit switching on an unbundled basis, a state commission shall perform the inquiry set forth in paragraphs (d)(2)(iii)(A) through (d)(2)(iii)(C) of this section:

(A) *Local switching triggers.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to local circuit switching on an unbundled basis in a particular market where either the self-provisioning trigger set forth in paragraph (d)(2)(iii)(A)(*1*) of this section or the competitive wholesale facilities trigger set forth in paragraph (d)(2)(iii)(A)(*2*) of this section is satisfied.

(*1*) *Local switching self-provisioning trigger.* To satisfy this trigger, a state commission must find that three or more competing providers not affiliated with each other or the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each are serving mass market customers in the particular market with the use of their own local switches.

(*2*) *Local switching competitive wholesale facilities trigger.* To satisfy this trigger, a state commission must find that two or more competing providers not affiliated with each other or the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each offer wholesale local switching service to customers serving

DS0 capacity loops in that market using their own switches.

(B) *Additional state authority.* If neither of the triggers described in paragraph (d)(2)(iii)(A) of this section has been satisfied, the state commission shall find that requesting telecommunications carriers are not impaired without access to unbundled local circuit switching in a particular market where the state commission determines that self-provisioning of local switching is economic based on the following criteria:

(*1*) *Evidence of actual deployment.* The state commission shall consider whether switches actually deployed in the market at issue permit competitive entry in the absence of unbundled local circuit switching. Specifically, the state commission shall examine whether, in the market at issue, there are either two wholesale providers or three self-provisioners of local switching not affiliated with each other or the incumbent LEC, serving end users using DS1 or higher capacity loops in the market at issue; or there is any carrier, including any intermodal provider of service comparable in quality to that of the incumbent LEC, using a self-provisioned switch to serve end users using DS0 capacity loops. If so, and if the state commission determines that the switch or switches identified can be used to serve end users using DS0 capacity loops in that market in an economic fashion, this evidence must be given substantial weight.

(*2*) *Operational barriers.* The state commission also shall examine the role of potential operational barriers in determining whether to find "no impairment" in a given market. Specifically, the state commission shall examine whether the incumbent LEC's performance in provisioning loops, difficulties in obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC, or difficulties in obtaining cross-connects in an incumbent LEC's wire center render entry uneconomic for requesting telecommunications carriers in the absence of unbundled access to local circuit switching.

(*3*) *Economic barriers.* The state commission shall also examine the role of potential economic barriers in determining whether to find "no impairment" in a given market. Specifically, the state commission shall examine whether the costs of migrating incumbent LEC loops to requesting telecommunications carriers' switches or the costs of backhauling voice circuits to requesting telecommunications carriers' switches from the end offices serving their end users render entry uneconomic for requesting telecommunications carriers.

(*4*) *Multi-line DS0 end users.* As part of the economic analysis set forth in paragraph (d)(2)(iii)(B)(*3*) of this section, the state commission shall establish a maximum number of DS0 loops for each geographic market that requesting telecommunications carriers can serve through

unbundled switching when serving multiline end users at a single location. Specifically, in establishing this "cutoff," the state commission shall take into account the point at which the increased revenue opportunity at a single location is sufficient to overcome impairment and the point at which multiline end users could be served in an economic fashion by higher capacity loops and a carrier's own switching and thus be considered part of the DS1 enterprise market.

(C) *Transitional use of unbundled switching.* If the triggers described in paragraph (d)(2)(iii)(A) of this section have not been satisfied with regard to a particular market and the analysis described in paragraph (d)(2)(iii)(B) of this section has resulted in a finding that requesting telecommunications carriers are impaired without access to local circuit switching on an unbundled basis in that market, the state commission shall consider whether any impairment would be cured by transitional ("rolling") access to local circuit switching on an unbundled basis for a period of 90 days or more. "Rolling" access means the use of unbundled local circuit switching for a limited period of time for each end-user customer to whom a requesting telecommunications carrier seeks to provide service. If the state commission determines that transitional access to unbundled local circuit switching would cure any impairment, it shall require incumbent LECs to make unbundled local circuit switching available to requesting telecommunications carriers for 90 days or

more, as specified by the state commission. The time limit set by the commission shall apply to each request for access to unbundled local circuit switching by a requesting telecommunications carrier on a *per customer* basis.

(iv) *DS0 capacity end-user transition.* If a state commission finds that no impairment exists in a market or that any impairment could be cured by transitional access to unbundled local circuit switching, all requesting telecommunications carriers in that market shall commit to an implementation plan with the incumbent LEC for the migration of the embedded unbundled switching mass market customer base within 2 months of the state commission determination. A requesting telecommunications carrier may no longer obtain access to unbundled local circuit switching 5 months after the state commission determination, except, where applicable, on a transitional basis as described in paragraph (d)(2)(iii)(C) of this section.

(A) *Transition timeline.* Each requesting telecommunications carrier shall submit the orders necessary to migrate its embedded base of end-user customers off of the unbundled local circuit switching element in accordance with the following timetable, measured from the day of the state commission determination. For purposes of calculating the number of customers who must be migrated, the embedded base of customers shall include all customers served using unbundled switching that are not customers being served with transitional unbundled switching pursuant to paragraph (d)(3)(iii)(C) of this section.

(*1*) *Month 13*: Each requesting telecommunications carrier must submit orders for one-third of all its unbundled local circuit switching end-user customers;

(*2*) *Month 20*: Each requesting telecommunications carrier must submit orders for half of its remaining unbundled local circuit switching end-user customers, as calculated pursuant to paragraph (d)(2)(iv)(A)(1) of this section; and

(*3*) Month 27: Each requesting telecommunications carrier must submit orders for its remaining unbundled local circuit switching end-user customers.

(B) *Operational aspects of the migration.* Requesting telecommunications carriers and the incumbent LEC shall jointly submit the details of their implementation plans for each market to the state commission within two months of the state commission's determination that requesting telecommunications carriers are not impaired without access to local circuit switching on an unbundled basis. Each requesting telecommunications carrier shall also notify the state commission when it has submitted its orders for migration. Each incumbent LEC shall notify the state commission when it has completed the migration.

(3) *DS1 capacity and above (i.e., enterprise market) determinations.* An incumbent LEC is not required to provide access to local circuit switching on an unbundled basis to requesting telecommunications carriers for the purpose of serving end-user customers using DS1 capacity and above loops except where the state commission petitions this Commission for waiver

of this finding in accordance with the conditions set forth in paragraph (d)(3)(i) of this section and the Commission grants such waiver.

(i) *State commission inquiry.* In its petition, a state commission wishing to rebut the Commission's finding should petition the Commission to show that requesting telecommunications carriers are impaired without access to local circuit switching to serve end users using DS1 capacity and above loops in a particular geographic market as defined in accordance with paragraph (d)(2)(i) of this section if it finds that operational or economic barriers exist in that market.

(A) In making this showing, the state commission shall consider the following operational characteristics: incumbent LEC performance in provisioning loops; difficulties associated with obtaining collocation space due to lack of space or delays in provisioning by the incumbent LEC; and the difficulties associated with obtaining cross-connects in the incumbent LEC's wire center.

(B) In making this showing, the state commission shall consider the following economic characteristics: the cost of entry into a particular market, including those caused by both operational and economic barriers to entry; requesting telecommunications carriers' potential revenues from serving enterprise customers in that market, including all likely revenues to be gained from entering that market; the prices requesting telecommunications carriers are likely to be able to charge in that market, based on a consideration of the prevailing retail rates the incumbent LEC charges to the different

classes of customers in the different parts of the state.

(ii) *Transitional four-line carve-out.* Until the state commission completes the review described in paragraph (b)(2)(iii)(B)(*4*) of this section, an incumbent LEC shall comply with the four-line "carve-out" for unbundled switching established in *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3822-31, paras. 276-98 (1999), *reversed and remanded in part sub. nom. United States Telecom Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002).

(A) *DS1 capacity and above end-user transition.* Each requesting telecommunications carrier shall transfer its end-user customers served using DS1 and above capacity loops and unbundled local circuit switching to an alternative arrangement within 90 days from the end of the 90-day state commission consideration period set forth in paragraph (d)(5)(i), unless a longer period is necessary to comply with a "change of law" provision in an applicable interconnection agreement.

(4) *Other elements to be unbundled.* Elements relating to the local circuit switching element shall be made available on an unbundled basis as set forth in paragraphs (d)(4)(i) and (d)(4)(ii) of this section.

(i) An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to signaling, call-related databases, and shared transport facilities on an unbundled basis, in accordance with section 251(c)(3) of the Act and

this part, to the extent that local circuit switching is required to be unbundled by a state commission. These elements are defined as follows:

(A) *Signaling networks*. Signaling networks include, but are not limited to, signaling links and signaling transfer points.

(B) *Call-related databases*. Call-related databases are defined as databases, other than operations support systems, that are used in signaling networks for billing and collection, or the transmission, routing, or other provision of a telecommunications service. Where a requesting telecommunications carrier purchases unbundled local circuit switching from an incumbent LEC, an incumbent LEC shall allow a requesting telecommunications carrier to use the incumbent LEC's service control point element in the same manner, and via the same signaling links, as the incumbent LEC itself.

(*1*) Call-related databases include, but are not limited to, the calling name database, 911 database, E911 database, line information database, toll free calling database, advanced intelligent network databases, and downstream number portability databases by means of physical access at the signaling transfer point linked to the unbundled databases.

(*2*) Service management systems are defined as computer databases or systems not part of the public switched network that interconnect to the service control point and send to the service control point information and call processing instructions needed for a network switch to

process and complete a telephone call, and provide a telecommunications carrier with the capability of entering and storing data regarding the processing and completing of a telephone call. Where a requesting telecommunications carrier purchases unbundled local circuit switching from an incumbent LEC, the incumbent LEC shall allow a requesting telecommunications carrier to use the incumbent LEC's service management systems by providing a requesting telecommunications carrier with the information necessary to enter correctly, or format for entry, the information relevant for input into the incumbent LEC's service management system, including access to design, create, test, and deploy advanced intelligent network-based services at the service management system, through a service creation environment, that the incumbent LEC provides to itself.

(*3*) An incumbent LEC shall not be required to unbundle the services created in the advanced intelligent network platform and architecture that qualify for proprietary treatment.

(C) *Shared transport.* Shared transport is defined as the transmission facilities shared by more than one carrier, including the incumbent LEC, between end office switches, between end office switches and tandem switches, and between tandem switches, in the incumbent LEC network.

(ii) An incumbent LEC shall provide a requesting telecommunications carrier nondiscriminatory

access to operator services and directory assistance on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part, to the extent that local circuit switching is required to be unbundled by a state commission, if the incumbent LEC does not provide that requesting telecommunications carrier with customized routing, or a compatible signaling protocol, necessary to use either a competing provider's operator services and directory assistance platform or the requesting telecommunications carrier's own platform. Operator services are any automatic or live assistance to a customer to arrange for billing or completion, or both, of a telephone call. Directory assistance is a service that allows subscribers to retrieve telephone numbers of other subscribers.

(5) *State commission proceedings.* A state commission shall complete the proceedings necessary to satisfy the requirements in paragraphs (d)(2) and (d)(3) of this section in accordance with paragraphs (d)(5)(i) and (d)(5)(ii) of this section.

(i) *Timing.* A state commission shall complete any initial review applying the triggers and criteria in paragraph (d)(2) of this section within nine months from the effective date of the Commission's Triennial Review Order. A state commission wishing to rebut the Commission's finding of non-impairment for DS1 and above enterprise switches must file a petition with the Commission in accordance with paragraph (d)(3) within 90 days from that effective date.

(ii) *Continuing review.* A state commission shall complete any subsequent review applying these triggers and criteria within six months of the filing of a petition or other pleading to conduct such a review.

(e) *Dedicated transport.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to dedicated transport on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part and as set forth in paragraph (e)(1) through (e)(5) of this section. As used in those paragraphs, a "route" is a transmission path between one of an incumbent LEC's wire centers or switches and another of the incumbent LEC's wire centers or switches. A route between two points (*e.g.,* wire center or switch "A" and wire center or switch "Z") may pass through one or more intermediate wire centers or switches (*e.g.,* wire center or switch "X"). Transmission paths between identical end points (*e.g.,* wire center or switch "A" and wire center or switch "Z") are the same "route," irrespective of whether they pass through the same intermediate wire centers or switches, if any.

(1) *Dedicated DS1 transport.* (i) An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to dedicated DS1 transport on an unbundled basis except where the state commission has found, through application of the competitive wholesale facilities trigger in paragraphs (e)(1)(ii) of this section, that requesting telecommunications carriers are not impaired without access to dedicated DS1 transport along a particular route. Dedicated DS1 transport consists of incumbent LEC interoffice transmission facilities that have a total digital signal speed of 1.544 megabytes per second and are dedicated to a particular customer or carrier.

(ii) *Competitive wholesale facilities trigger for dedicated DS1 transport.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to dedicated DS1 transport along a particular route where two or more competing providers not affiliated with each other or with the incumbent LEC, including

intermodal providers of service comparable in quality to that of the incumbent LEC, each satisfy the conditions in paragraphs (e)(1)(ii)(A) through (e)(1)(ii)(D) of this section.

(A) The competing provider has deployed its own transport facilities and is operationally ready to use those facilities to provide dedicated DS1 transport along the particular route. For purposes of this paragraph, the competing provider's DS1 facilities may use dark fiber facilities that the competing provider has obtained on an unbundled, leased, or purchased basis if it has attached its own optronics to activate the fiber.

(B) The competing provider is willing immediately to provide, on a widely available basis, dedicated DS1 transport along the particular route.

(C) The competing provider's facilities terminate in a collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and in a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(D) Requesting telecommunications carriers are able to obtain reasonable and nondiscriminatory access to the competing provider's facilities through a cross-connect to the competing provider's collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and though a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(2) *Dedicated DS3 transport.* Subject to the cap in paragraph (e)(2)(iii) of this section, an incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to dedicated DS3 transport on an unbundled basis except where the state commission has found, through application of either paragraph (e)(2)(i) of this section or the potential deployment analysis in paragraph (e)(2)(ii) of this section, that requesting telecommunications carriers are not impaired without access to dedicated DS3 transport along a particular route. Dedicated DS3 transport consists of incumbent LEC interoffice transmission facilities that have a total digital signal speed of 44.736 megabytes per second and are dedicated to a particular customer or carrier.

(i) *Triggers for dedicated DS3 transport.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to unbundled dedicated DS3 transport along a particular route where either of the triggers in paragraphs (e)(2)(i)(A) or (e)(2)(i)(B) of this section is satisfied.

(A) *Self-provisioning trigger for dedicated DS3 transport.* To satisfy this trigger, a state must find that three or more competing providers not affiliated with each other or with the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each satisfy the conditions in paragraphs (e)(2)(i)(A)(*1*) and (e)(2)(i)(A)(*2*) of this section.

(*1*) The competing provider has deployed its own transport facilities and is operationally ready to use those transport facilities to provide dedicated DS3 transport along the particular route. For

purposes of this paragraph, the competing provider's DS3 transport facilities may use dark fiber facilities that the competing provider has obtained on a long-term, indefeasible-right of use basis and that it has deployed by attaching its own optronics to activate the fiber.

(*2*) The competing provider's facilities terminate at a collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and in a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(B) *Competitive wholesale facilities trigger for dedicated DS3 transport.* To satisfy this trigger, a state must find that two or more competing providers not affiliated with each other or with the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each satisfy the conditions in paragraphs (e)(2)(i)(B)(*1*) through (e)(2)(i)(B)(*4*) of this section.

(*1*) The competing provider has deployed its own transport facilities, including transport facilities that use dark fiber facilities that the competing provider has obtained on an unbundled, leased, or purchased basis if it has attached its own optronics to activate the fiber, and is operationally ready to use those facilities to provide dedicated DS3 transport along the particular route.

(*2*) The competing provider is willing immediately to provide, on a widely available basis, dedicated DS3 transport along the particular route.

(*3*) The competing provider's facilities terminate in a collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and in a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(*4*) Requesting telecommunications carriers are able to obtain reasonable and nondiscriminatory access to the competing provider's facilities through a cross-connect to the competing provider's collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and though a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(ii) *Potential deployment of dedicated DS3 transport.* Where neither trigger in paragraph (e)(2)(i) of this section is satisfied, a state commission shall consider whether other evidence shows that a requesting telecommunications carrier is not impaired without access to unbundled dedicated DS3 transport along a particular route. To make this determination, a state must consider the following factors: local engineering costs of building and utilizing transmission facilities; the cost of underground or aerial laying of fiber or copper; the cost of equipment needed for transmission; installation and other necessary costs involved in setting up service; local topography

such as hills and rivers; availability of reasonable access to rights-of-way; availability/feasibility of similar quality/reliability alternative transmission technologies along the particular route; customer density or addressable market; and existing facilities-based competition.

(iii) *Cap on unbundled DS3 circuits.* A requesting telecommunications carrier may obtain a maximum of 12 unbundled dedicated DS3 circuits for any single route for which dedicated DS3 transport is available as unbundled transport.

(3) *Dark fiber transport.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to dark fiber transport on an unbundled basis except where the state commission has found, through application of either paragraph (e)(3)(i) of this section or the potential deployment analysis in paragraph (e)(3)(ii) of this section, that requesting telecommunications carriers are not impaired without access to unbundled dark fiber transport along the particular route. Dark fiber transport consists of unactivated optical interoffice transmission facilities.

(i) *Triggers for dark fiber transport.* A state commission shall find that a requesting telecommunications carrier is not impaired without access to dark fiber transport along a particular route where either of the triggers in paragraph (e)(3)(i)(A) or paragraph (e)(3)(i)(B) of this section is satisfied.

(A) *Self-provisioning trigger for dark fiber transport.* To satisfy this trigger, a state commission must find three or more competing providers not affiliated with each other or with the incumbent LEC, each satisfy paragraphs (e)(3)(i)(A)(*1*) and (e)(3)(i)(A)(*2*) of this section.

(*1*) The competing provider has deployed its own dark fiber facilities, which may include dark fiber facilities that it has obtained on a long-term, indefeasible-right of use basis.

(*2*) The competing provider's facilities terminate in a collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and in a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(B) *Competitive wholesale facilities trigger for dark fiber transport.* To satisfy this trigger, a state commission must find that two or more competing providers not affiliated with each other or with the incumbent LEC, each satisfy paragraphs (e)(3)(i)(B)(*1*) through (e)(3)(i)(B)(*4*) of this section. In applying this trigger, the state commission may consider whether competing providers have sufficient quantities of dark fiber available to satisfy current demand along that route.

(*1*) The competing provider has deployed its own dark fiber, including dark fiber that it has obtained from an entity other than the incumbent LEC, and is operationally ready to lease or sell those facilities for the provision of fiber-based transport along the particular route.

(*2*) The competing provider is willing immediately to provide, on a widely available basis, dark fiber along the particular route.

(*3*) The competing provider's dark fiber terminates in a collocation arrangement at

each end of the transport route that is located at an incumbent LEC premises and in a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(*4*) Requesting telecommunications carriers are able to obtain reasonable and nondiscriminatory access to the competing provider's dark fiber through a cross-connect to the competing provider's collocation arrangement at each end of the transport route that is located at an incumbent LEC premises and though a similar arrangement at each end of the transport route that is not located at an incumbent LEC premises.

(ii) *Potential deployment of dark fiber transport.* Where neither trigger in paragraph (e)(3)(i) of this section is satisfied, a state commission shall consider whether other evidence shows that a requesting telecommunications carrier is not impaired without access to unbundled dark fiber transport along a particular route. To make this determination, a state must consider the following factors: local engineering costs of building and utilizing transmission facilities; the cost of underground or aerial laying of fiber; the cost of equipment needed for transmission; installation and other necessary costs involved in setting up service; local topography such as hills and rivers; availability of reasonable access to rights-of-way; availability/feasibility of similar quality/reliability alternative transmission technologies along the particular route; customer density or addressable market; and existing facilities-based competition.

(4) *State commission proceedings.* A state commission shall complete the proceedings necessary to satisfy the requirements in paragraphs (e)(1), (e)(2), and (e)(3) of this section in accordance with paragraphs (e)(4)(i) and (e)(4)(ii) of this section.

(i) *Initial review.* A state commission shall complete any initial review applying the triggers and criteria in paragraphs (e)(1), (e)(2), and (e)(3) of this section within nine months from the effective date of the Commission's Triennial Review Order.

(ii) *Continuing review.* A state commission shall complete any subsequent review applying these triggers and criteria within six months of the filing of a petition or other pleading to conduct such a review.

(5) *Routine network modifications.* (i) An incumbent LEC shall make all routine network modifications to unbundled dedicated transport facilities used by requesting telecommunications carriers where the requested dedicated transport facilities have already been constructed. An incumbent LEC shall perform all routine network modifications to unbundled dedicated transport facilities in a nondiscriminatory fashion, without regard to whether the facility being accessed was constructed on behalf, or in accordance with the specifications, of any carrier.

(ii) A routine network modification is an activity that the incumbent LEC regularly undertakes for its own customers. Routine network modifications include, but are not limited to, rearranging or splicing of cable; adding an equipment case; adding a doubler or repeater; installing a repeater shelf; and deploying a new multiplexer or reconfiguring an existing multiplexer. They also include activities needed to enable a requesting telecom-

munications carrier to light a dark fiber transport facility. Routine network modifications may entail activities such as accessing manholes, deploying bucket trucks to reach aerial cable, and installing equipment casings. Routine network modifications do not include the installation of new aerial or buried cable for a requesting telecommunications carrier.

(f) *911 and E911 databases.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to 911 and E911 databases on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part.

(g) *Operations support systems.* An incumbent LEC shall provide a requesting telecommunications carrier with nondiscriminatory access to operations support systems on an unbundled basis, in accordance with section 251(c)(3) of the Act and this part. Operations support system functions consist of pre-ordering, ordering, provisioning, maintenance and repair, and billing functions supported by an incumbent LEC's databases and information. An incumbent LEC, as part of its duty to provide access to the pre-ordering function, shall provide the requesting telecommunications carrier with nondiscriminatory access to the same detailed information about the loop that is available to the incumbent LEC.

12. Section 51.320 is added to read as follows:

§ 51.320 Assumption of responsibility by the Commission.

If a state commission fails to exercise its authority under § 51.319, any party seeking that the Commission step into the role of the state commission shall file with the Commission and serve on the state commission a petition that explains with specificity the bases for the petition and information that supports the claim that the state commission has failed to act. Subsequent to the Commission's issuing a public notice and soliciting comments on the petition from interested parties,

the Commission will rule on the petition within 90 days of the date of the public notice. If it agrees that the state commission has failed to act, the Commission will assume responsibility for the proceeding, and within nine months from the date it assumed responsibility for the proceeding, make any findings in accordance with the Commission's rules.

13. Section 51.325 is amended by adding paragraph (a)(4) to read as follows:

§ 51.325 Notice of network changes: Public notice requirement.

(a) ***

(4) Will result in the retirement of copper loops or copper subloops, and the replacement of such loops with fiber-to-the-home loops, as that term is defined in § 51.319(a)(3).

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14. Section 51.331 is amended by adding paragraph (c) to read as follows:

§ 51.331 Notice of network changes: Timing of notice.

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(c) Competing service providers may object to incumbent LEC notice of retirement of copper loops or copper subloops and replacement with fiber-to-the-home loops in the manner set forth in § 51.333(c).

15. Section 51.333 is amended by revising the section heading, paragraphs (b) and (c) introductory test, and by adding paragraph (f) to read as follows:

§ 51.333 Notice of Network Changes: Short term notice, objections thereto and objections to retirement of copper loops or copper subloops.

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(b) *Implementation date.* The Commission will release a public notice of filings of such short term notices or notices of replacement of copper loops or copper subloops with fiber-to-the-home loops. The effective date of the network changes referenced in those filings shall be subject to the following requirements:

(i) *Short term notice.* Short term notices shall be deemed final on the tenth business day after the release of the Commission's public notice, unless an objection is filed pursuant to paragraph (c) of this section.

(ii) *Replacement of copper loops or copper subloops with fiber-to-the-home loops.* Notices of replacement of copper loops or copper subloops with fiber-to-the-home loops shall be deemed approved on the 90th day after the release of the Commission's public notice of the filing, unless an objection is filed pursuant to paragraph (c) of this section. Incumbent LEC notice of intent to retire any copper loops or copper subloops and replace such loops or subloops with fiber-to-the-home loops shall be subject to the short term notice provisions of this section, but under no circumstances may an incumbent LEC provide less than 90 days notice of such a change.

(c) *Objection procedures for short term notice and notices of replacement of copper loops or copper subloops with fiber-to-the-home loops.* An objection to an incumbent LEC's short term notice or to its notice that it intends to retire copper loops or copper subloops and replace such loops or subloops with fiber-to-the-home loops may be filed by an information service provider or telecommunications service provider that directly interconnects with the incumbent LEC's network. Such objections must be filed with the Commission, and served on the incumbent LEC, no later than the ninth business day following the release of the Commission's public notice. All objections filed under this section must:

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(f) *Resolution of objections to replacement of copper loops or copper subloops with fiber-to-the-home loops.* An objection to a notice that an incumbent LEC intends to retire any copper loops or copper subloops and replace such loops or subloops with fiber-to-the-home loops shall be deemed denied 90 days after the date on which the Commission releases public notice of the incumbent LEC filing, unless the Commission rules otherwise within that time. Until the Commission has either ruled on an objection or the 90-day period for the Commission's consideration has expired, an incumbent LEC may not retire those copper loops or copper subloops at issue for replacement with fiber-to-the-home loops.

16. Section 51.509 is amended by revising paragraph (a) and adding paragraph (h) to read as follows:

§ 51.509 Rate structure standards for specific elements.

(a) *Local loop and subloop.* Loop and subloop costs shall be recovered through flat-rated charges.

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(h) *Network interface device.* An incumbent LEC must establish a price for the network interface device when that unbundled network element is purchased on a stand-alone basis pursuant to § 51.319(c).

SEPARATE STATEMENT OF
CHAIRMAN MICHAEL K. POWELL
APPROVING IN PART AND DISSENTING IN PART

Re: Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers (CC Docket No. 01-338), Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 (CC Docket No.96-98), and Deployment of Wireline Services Offering Advanced Telecommunications Capability (CC Docket No. 98-147).

Today, the Commission concludes one of its most significant proceedings ever. The Triennial Review has been a complicated and difficult undertaking, but one that will set critical parameters for competition and broadband deployment for years to come. There are some important achievements in this Order that have long been objectives of mine—namely, substantial broadband relief. Yet, regrettably, there are some fateful decisions as well that I believe represent poor policy and which flout the law. While I am pleased that the Majority has made a number of changes to their UNE-P decision that respond to my concerns, significant legal failings remain. Accordingly, I must respectfully dissent.

I. The Order Takes Bold Steps to Promote Broadband Investment

I begin with the substantial step we take today to create a broadband regulatory regime that will stimulate and promote deployment of next-generation infrastructure, bringing a bevy of new services and applications to consumers. I have long stated that broadband deployment is the most central communications policy objective of our day. Today, we at last put some substance into that stated goal. I am proud to say that we take some vital steps across the desert from the analog world to the digital one. Today's decision makes

significant strides to promote investment in advanced architecture and fiber by removing unbundling obligations consistent with a faithful application of Congress' impair standard. Consistent with the statute, the Order removes unbundling obligations that have applied to last mile "Fiber to the Home" deployments. In hybrid copper-fiber networks, the Commission has determined that incumbent LECs are not required to unbundle packet-switching functionality provided over these facilities; but competitors will continue to receive access to high-capacity loops provided over incumbent LEC Time Division Multiplexing ("TDM") networks.[1] These decisions mean that the digital migration is one step further along, as more investment flows into the deployment of these advanced networks.

To date, line sharing is the Commission's most successful broadband policy and it has generated clear and measurable benefits for consumers. It has unquestionably given birth to important broadband suppliers. This additional facilities-based competition has directly contributed to lower prices for new broadband services.

I also believe the argument that removing line sharing is a form of positive regulatory relief to stimulate broadband is ill-conceived. Line sharing rides on the old copper infrastructure, not on the new advanced fiber networks that we are attempting to push to deployment. Indeed, the continued availability of line sharing and the competition that flowed from it likely would have pressured incumbents to deploy more advanced networks in order to move from the negative regulatory pole to the positive regulatory pole, by deploying more fiber infrastructure. This decision actually diminishes the competitive pressure to do so.

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[1] In so doing, we require incumbent LECs to unbundle legacy technologies such as HDSL while removing barriers to the deployment of innovative advanced electronics such as Passive Optical Networking ("PON") components.

II. The Majority's Switching Decision Is Bad Law, Bad Policy and Ultimately Bad for Consumers

In opening this proceeding, this Commission committed itself to conduct a thorough review of its unbundling policies. This review took on greater importance in light of a slumping telecommunications sector and the D.C. Circuit's *USTA* decision vacating the rules that unbundled every element of an incumbent's network. Thus, the Commission was ordered to reconstruct its list of unbundled elements from the ground up—making an element available only if the Commission could show a competitor was significantly impaired without it. As we have endeavored to do so, the most controversial judgment rested with the switching element. The importance of this element is not in its particular functionality, but that it represents the capstone of what has become known as the unbundled platform or UNE-P. UNE-P is nothing more than a complete use of the incumbent's network, priced by element. This results in a substantially lower price than the statute allows for resale. If switching is available, it is very likely a carrier can resell the entire incumbent's network, at heavily discounted rates set by regulators, without having to provide anything in the way of its own infrastructure. After one sorts through the legal contortions of the Majority's switching decision he will find an Order remarkably similar to the prior two fatal decisions—one that preserves UNE-P as the favored mode of competition, without any meaningful consideration of the social and economic costs of unbundling. This is bad policy and bad law.

Consistently underlying my position is a commitment to promote and advance competition that is meaningful and sustainable, and that will eventually achieve Congress' goal of reducing regulation and promoting facilities-based

competition.[2] The benefits of such a policy are straightforward:

- Facilities-based competition means a competitor can offer service differentiated from the incumbent.
- Facilities-based competitors own more of their network and can control more of their costs, thereby offering consumers real potential for lower prices.
- Facilities-based competitors are less dependent on the incumbent thereby reducing the need for regulation—an explicit Congressional goal.
- Facilities-based competitors also create vital redundant networks that can serve our nation if other facilities are damaged by those hostile to our way of life.

Apparently, the Majority is a big fan of UNE-P, because it has contorted the letter and spirit of the statute and the court's interpretation of our responsibilities in an effort to ensure its indefinite preservation. What is remarkable about this decision is that one looks in vain to find a clear or coherent federal policy in the Majority's choices. Today's decision clearly steps back from a pro-facilities policy, by favoring extensive regulatory management of incumbent networks. Under this regime, state regulators set retail rates, state regulators set all wholesale rates, and state regulators determine what elements will be made available. More distressing than giving facilities providers the back of their hand, I see no meaningful federal policy put in its place, other than vague and solicitous pronouncements about the states

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[2] The Commission recognized in the last unbundling order that the goal of our regime is to "promote the development of facilities-based competition." *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, 15 FCC Rcd 3696, para. 7 (1999) ("UNE Remand Order"). Today's UNE-P decision, however, does not support the established proposition that facilities-based competition is the preferred method to achieve the twin Congressional goals of deregulation and competition.

playing the lead role in making these determinations and a commitment to "competition," no matter how anemic or artificial. Congress demanded the Commission not be so demur when it vested it with responsibility for the unbundling regime.

This proceeding began properly as an exercise to determine what elements should be unbundled. It was transformed into a battle not over *what* should be unbundled, but *who* should decide—this Commission or the states. Make no mistake, the role of the states dominated this proceeding solely because states are perceived as a more favorable venue for preserving the *status quo* of aggressive unbundling rights. Indeed, this perception is not without support as the states, through the National Association of Regulatory Utility Commissions (NARUC), supported the "universal availability of UNE-P."[3] Competitors who once viewed states as less than perfect protectors of competition, swapped positions and took refuge in a states rights debate that was a stalking horse for a policy of maximum unbundling. In this environment, the Majority decided to take a politically expedient course instead of the right course: they decided not to make any of the difficult calls that this proceeding demanded. Notwithstan-ding the tens of thousands of pages of record evidence compiled over the course of a full year and the tireless work of Commission staff, the Majority ruled that there was little basis in the record for any conclusive decision and that states, instead, should make the lion's share of unbundling determinations. The record was beside the point, the goal was to keep UNE-P in place. In so doing, the Majority's decision substantially repeats the errors of our past approaches to unbundling.

III. The Majority's Decision Does Not Establish A Meaningful Limit on Unbundled Switching As the Courts Require

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[3] Letter from Joan Smith, Chair, NARUC to Chairman Michael K. Powell (December 5, 2001).

A. The Majority's Decision to Unbundle Switching for the Mass Market is Flawed

I also dissent from the switching section of this *Order* because I find a Commission majority for the third time in seven years substituting its preference for a heavily permissive unbundling regime for Congress's judgment that no element should be provided unless the Commission can affirmatively conclude that a competitor is impaired without it. The Supreme Court admonished that section 251(d)(2) placed "clear limits" on the Commission's authority to order unbundling. *AT&T v. Iowa Utils. Bd.*, 525 U.S. 388, 397 (1999). The Commission's second unbundling attempt also failed, when the D.C. Circuit vacated our rules last summer. The D.C. Circuit emphasized that the Commission could not treat unbundling as an unqualified good and had to consider the social costs as well. *See United States Telcom Ass'n v. FCC*, 290 F.3d 415, 427 (D.C. Cir. 2002). It also admonished that the standard employed and applied by the FCC had to demonstrate that a typical entrant was effectively prohibited from entering the market due to barriers associated with the monopoly power of the incumbent and not just typical start-up costs or costs naturally associated with entry. *Id.* at 422. In reaching its switching decision, the Majority flouts the D.C. Circuit's mandate.

I begin with a discussion of the Majority's mass market switching decision. First I question whether the Majority has adequately explained its conclusion that competitors are operationally impaired without unbundled switching as a national matter. Second, I discuss whether the Majority's economic impairment analysis provides a meaningful limitation on the availability of UNE-P. Finally, I examine the Majority's approach to UNE-P in the business market.

i. The Majority Decision Ignores Record Evidence of Hot Cut Performance as a Limitation on Unbundled Switching

In the mass market, the Majority rests its switch unbundling requirement solely on the blanket judgment that the incumbent "hot cut" process—a process that relates solely to loop provisioning—justifies unbridled switch unbundling. This speculative, nationalized finding ignores substantial record evidence and cannot be squared with this Commission's own findings that incumbent LECs perform hot cuts at sufficient levels to demonstrate that competitors are presented with a meaningful opportunity to compete. Indeed, in each and every one of the orders approving Bell Company applications to provide long distance service, the Commission has found, after painstaking state review, that this standard is met.[4] The Majority on the other hand has

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[4] Indeed we have now examined the hot cut processes in 42 states and the District of Columbia and found that each and every BOC has in place a hot cut process that provides competitors a meaningful opportunity to compete. *See e.g., Application by SBC Communications Inc., Southwestern Bell Telephone Company, And Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance; Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services In Texas*, CC Docket No. 00-65, FCC 00-238, Memorandum Opinion and Order, 15 FCC Rcd 18354, 18490-93, paras. 268-73 (2000); *Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, CC Docket No. 00-217, FCC 01-29, Memorandum Opinion and Order, 16 FCC Rcd 6237, 6340, para. 207 (2001); *Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., And BellSouth Long Distance, Inc for Provision of In-Region, InterLATA Services In Georgia and Louisiana*, CC Docket No. 02-35, FCC 02-147, Memorandum Opinion and Order, 16 FCC Rcd 9018, 9145, para. 220 (2002); *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, CC Docket No. 99-295, FCC 99-404, Memorandum Opinion and Order, 15 FCC Rcd 3953, 4104-05, para. 291 (1999); *Application by Qwest Communications Internationl, Inc. for Authorization to Provide In-Region, InterLATA Services in the States of Colorado, Idaho, Iowa, Montana, Nebraska, North Dakota, Utah,*

loftily abstracted away from the granular findings of this Commission's 271 Orders in favor of vague pronouncements that lead back to variation on that same state-sponsored process. Such a tautology cannot withstand scrutiny.

The Majority disregards this objective evidence in the record on the ground that hot cut volumes could substantially increase if UNE-P were phased out. Based entirely on speculation that such an increase could result in a degradation of hot cut performance, the Majority presumes impairment. But even here the Majority is not entirely certain of its own conclusion, stating that "it is *unlikely* that incumbent LECs will be able to provision hot cuts in sufficient volumes absent unbundled local switching in all markets."[5] I cannot agree with a Commission finding that the hot cut process is so presumptively broken that incumbents must offer UNE-P indefinitely without a "more nuanced concept" of where and when that process might cause impairment. *United States Telecom Ass'n v. FCC*, 290 F.3d at 426. The Majority's finding likewise flies in the face of substantial record evidence that incumbents can perform at levels to meet "reasonably foreseeable demand volumes" for hot cuts. *E.g.*, *New York 271 Order*, 15 FCC Rcd at 3993.[6] Additionally, there are other, more direct methods of ensuring that the hot cut process is working that fall short of the extraordinary

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Washington and Wyoming, WC Docket No. 02-314, FCC 02-332, Memorandum Opinion and Order, 17 FCC Rcd 26,303, 26,370, para. 107 (2002).

[5] Order para. 468 (emphasis added).

[6] The Majority erroneously cites the New York Commission's conclusion that "it would take Verizon over 11 years to switch all the existing UNE-P customers to UNE-L" without disclosing that the New York Commission did not assume any increase in the incumbent's hot cut capacity scaled to meet reasonable forecasts of demand. *See* Order para. 469.

remedy of unbundling the switch.[7] I would have preferred to continue the existing partnership with state regulators to further define an incumbent's obligations in this area and, where it is demonstrated that the hot cut processes has broken down, order a narrowly tailored remedy.

ii. The Majority's Mass Market Switch Triggers Are Illusory

After wading through the complexity of the Majority's regulatory framework for mass market switching, two conclusions emerge from the tangle of conflicting pronouncements: First, the "objective" switch triggers relied upon by the Majority are an illusory limitation. Second, because the switching triggers are not a meaningful limitation, states are essentially free to do as they wish.

The Majority purports to constrain state discretion by removing unbundled switching where 3 self-provisioned switches or 2 wholesalers are present in a given market.[8] This is no limitation at all. Indeed there may be few markets, if any, that include three competitors using self-provisioned switching to serve the mass market. Directing states to apply this trigger is therefore largely a meaningless exercise. Why? Because an honest inquiry into this area must recognize what the record amply demonstrates: there is a correlation between the availability of UNE-P and the failure of competitors to utilize their own switching capacity. I fully appreciate the challenges that carriers face in utilizing self-provisioned switching to serve the mass market. I cannot square the Majority's approach, which sets a trigger at a level that is presently satisfied almost nowhere, with a record that shows

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[7] For example, state regulators could continue their existing, active approach to enforcing hot cut performance measures; unbundled switching might serve as a remedy where poor hot cut performance is demonstrated.

[8] Order para. 463.

competitors are *now* widely serving mass market customers using their own switches and unbundled loops.

Furthermore, the Commission's own data is replete with findings that the average number of lines that competing carriers serve with their own switches and unbundled loops dropped sharply between the beginning of 2000 and June of 2002. In just eight of the states where carriers now make extensive use of UNE-P, competitors are connecting more than 45,000 fewer lines per month—or more than half a million *fewer* lines per year—to their own switches using unbundled loops compared to 2000.[9] Far from fostering a transition to facilities-based networks, the Commission's data suggest that some carriers are moving existing lines from their switches to UNE-P, leaving competitor switches underutilized.[10] These facts suggest that it is unreasonable to expect that competitors will utilize self-provisioned switching

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[9] The eight states are New York, New Jersey, Massachusetts, Georgia, Florida, Illinois, California, and Texas. *Selected RBOC Local Telephone Data, available at:* http://www.fcc.gov/wcb/iatd/comp.html (RBOC Local Telephone Dec 1999.xls; RBOC Local Telephone June 2000.xls; RBOC Local Telephone Dec. 2000.xls; RBOC Local Telephone June 2001.xls; RBOC Local Telephone Dec 2001.xls; RBOC Local Telephone June 2002.xls).

[10] The Commission's data show that the number of CLEC-owned lines other than those provided by cable decreased by half a million lines between December 2002 and June 2002, while the number of UNE-P lines increased from 5.8 to 7.5 million. *See Local Telephone Competition: Status as of June 30, 2002* (December 2002) at Tables 2, 3 & 5; *Local Telephone Competition: Status as of June 30, 2000* (December 2000) at Table 5. *See, e.g.*, UNE Rebuttal Report 2002, Prepared for BellSouth, SBC, Qwest, and Verizon, filed with the Federal Communications Commission, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, at 30 (October 2002) ("UNE Rebuttal Report"). The failure of facilities-based CLECs to accelerate their deployment plans may likewise explain why the rollout of cable telephony has proceeded at a slower pace than many expected.

capacity while a steeply discounted and long-term UNE-P alternative exists.[11]

The purportedly "objective" and "mandatory" switch trigger is also undermined by unheeled discretion states are permitted in defining the market to which the trigger applies. Every antitrust lawyer knows that the outcome of any case is generally won or lost over how the market is defined. The same is true of the Majority's impairment analysis.[12] While conceding that the "triggers and analysis . . . must be applied on a granular basis to each identifiable market" the Majority bounds the market definition exercise only by acknowledging that states "may not define the market as encompassing the entire state."[13] Under this guidance, it could be argued, that the state of Rhode Island cannot define the geographic scope of its market any larger than its 1545 square miles will permit; but next door, Massachusetts regulators are free to define the market nearly seven times larger than their Rhode Island counterparts. Never mind that it is possible for switches located in Providence to serve a customer in Boston. This is not granularity, it is gerrymandering. Put simply, states are likely to reach wildly different results in applying the trigger because the trigger is tied to state market definitions that can be as large as a LATA and as small as a wire center.[14] The Majority responds that the physical location of the switch may have little if anything to do with the location of the customer served by a switch; but that rationale calls into question the very premise that states are

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[11] I cannot agree that the presence of a batch migration process will sufficiently counter the powerful incentive of carriers to send merely an order to obtain a UNE-P arrangement rather than utilize their own switching capacity.

[12] States are granted "discretion to determine the contours of each market" in conducting their impairment inquiries. Order para. 495.

[13] Order para. 495.

[14] *See* Order para. 495.

uniquely qualified to make these judgments, which is the cornerstone of the Majority's holding, and suggests a national finding is more appropriate. The Majority's market-definition approach is therefore not sufficiently grounded in objective, limiting criteria.

iii. The Majority Delegates to the States the Power to Unbundle Switching Based on Economic Impairment, Without Meaningful Limits

The Majority finds impairment based solely on the basis of operational impairment and the "hot cut" process. Yet, it empowers states to find economic impairment (even after curing the operational concern) based on a laundry list of possible economic disadvantages.[15] The first error it makes in taking this path is that the Majority blinds itself to the significant self-provisioned switching capacity that exists in the market and the fact that a number of competitors have overcome whatever economic impediments exist and are using that switching capability to serve mass market customers.[16] I believe the record supports an approach that

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[15] The Majority's list of possible sources of economic impairment could hardly be longer. Potential costs that a state commission must consider include: "the cost of purchasing and installing a switch, the recurring and non-recurring charges paid to the incumbent LEC for loops, collocations, transport, hot cuts, OSS, signaling, and other services and equipment necessary to access the loop; the cost of collocation and equipment necessary to serve local exchange customers in a wire center, taking into consideration an entrant's likely market share, the scale economies inherent to serving a wire center and the line density of the wire center; the cost of backhauling the local traffic to the competitors switch; other costs associated with transferring the customer's service over to the competitor; the impact of churn on the cost of customer acquisitions; the cost of maintenance, operations and other administrative activities and the competitors' capital costs." Order para. 520.

[16] *See* BOC UNE Fact Report 2002 at I-9, Figure 6 Use of UNE Platforms by CLECs Providing Service to 25,000 or More Residential Lines Using Their Own Switches ("CLECs providing service to 25,000 or more facilities-based residential lines include: ALLTEL, Broadview,

would have enlisted states in a joint enforcement regime designed to address operational issues that might frustrate a transition to facilities-based competition. Instead, the Majority has unleashed a chaotic process that directs the states to find economic impairment that is simply not cognizable under section 251(d)(2).

As described below, states are free to do what they choose in weighting the Majority's economic criteria in divergent and subjective ways. Indeed, given these economic criteria, it would be difficult to judge whether an individual state has complied with the delegation granted to it.[17] Perhaps this is why the Majority has resisted an exclusive appeal right to this Commission and suggested that federal district courts—in lieu of this Commission—are an appropriate venue to review state decisions that apply these factors.[18] The significance of *Commission* oversight over this delegation should not be underestimated.[19] In my view, the statute commits to this Commission the ultimate responsibility for ensuring *its*

Cavalier Telephone, Intermedia, Knology, McLeodUSA, RCA, TOTALink).

[17] Federal district courts reviewing state decisions are likely to fare no better for the same reasons this Commission would have difficulty comparing state action against non-existent federal standards.

[18] The Majority admits that interested parties could file a section 208 complaint or petition for declaratory ruling with this Commission to ensure oversight with the Commission's switching framework. *See* Order para. 426. I cannot agree, however, that a section 208 adjudicatory proceeding is an appropriate procedural vehicle for oversight of state unbundling determinations of general applicability made pursuant to section 251(d)(2).

[19] For this reason, Commissioner Abernathy and I supported a specific, exclusive appeal right to this Commission to implement the transport decision; but such a right was not supported by the Majority. Transferring oversight responsibility to federal district courts under the guise of their arbitration review authority is, in my view, inconsistent with the statutory command that "the Commission shall consider" which network elements will be unbundled. 47 U.S.C. § 251(d)(2).

unbundling decisions are adhered to. To remain faithful to the statutory scheme and principles of federal supremacy, however, the Commission must retain the *primary* decision making authority, and we must establish *clear* standards for the states to apply.[20]

There is no doubt that the statute does contemplate a state/federal partnership in certain areas. States are given control over the rates set for unbundled elements, but it is principally the obligation of this Commission to determine what those elements will be, faithfully implementing the impairment clause. States can assist in that effort, but our responsibilities should not be released to them. Justice Antonin Scalia, whose credentials are unchallenged as a leading voice for states' rights, eloquently addressed the division of federal and state authority when he wrote:

> [t]he question in these cases is not whether the Federal Government has taken the regulation of local telecommunications competition away from the States. With regard to the matters addressed by the 1996 Act, it unquestionably has. The question is whether the state commissions in the administration of the new *federal* regime is to be guided by federal-agency regulations. If there is any 'presumption' applicable to this question it

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[20] For this reason, I fully support the Commission's delegation of federal authority to states to implement the Commission's unanimous transport and high-cap loop decision. In reaching the Commission's binding transport and high-capacity loop decisions we grant states a fact-finding role to implement our decision and therefore avoid abdicating our responsibilities under the Act. The Majority struggles to square the circle and harmonize its switching approach with our unanimous transport decision; but significant differences remain. First, because the triggers are set at an appropriate level for the transport market, our transport decision establishes a meaningful limitation on unnecessary unbundling. Second, because the transport triggers establish a meaningful limitation, there is less of a need for the Commission to direct the states to engage in a subjective, multi-factor impairment analysis as in the Majority's switching decision.

> should arise from the fact that a federal program administered by 50 independent state agencies is surpassing strange . . . .

AT&T v. Iowa Utils. Bd. 525 U.S. 388, 391. I could not agree more.[21]

1. The Majority's Subjective Economic Criteria Treats UNE-P as an Unqualified Good and Engages in Impermissible Bootstrapping

The *USTA* court cautioned this Commission not to rely on start up costs ordinarily associated with entry or conditions set by regulatory bodies in reaching our unbundling decision.[22] Yet the Majority repeatedly relies upon ordinary

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[21] Compromise within the limits of the law is undoubtedly necessary for the administrative process to function smoothly; but on the question of federal—state relations, our efforts to compromise must not run afoul of the statutory scheme. The Majority charges me with hypocrisy by citing a single sentence in a past statement taken out of context, as evidence that I should support the switching result in the item released today. Order para. 425 n. 1306. The Majority stresses their opinion that the dissenters did not make sufficient efforts at compromise; but their citations to my past statements and parts of the item to which I consented, leaves me wondering whether the Majority may be more interested in one-upsmanship than compromise. As I describe below, I continue to believe that state regulators can assist in our efforts to achieve a rational unbundling regime, but our responsibilities should not be released to them. There is no inconsistency between my past statements and my current position that the Majority simply goes too far in that direction. If questions remain about my views, there is no doubt that I have grown in my concern about the long-term viability of UNE-P. This concern was amplified after the D.C. Circuit's *USTA* decision. To the extent a judicial decision intervened to change the legal landscape and caused me to rethink and expand upon my initial position, I do so humbly and openly, mindful that "wisdom too often never comes, and so one ought not to reject it merely because it comes late." *Henslee v. Union Planters*, 335 U.S. 595 (1949) (Frankfurter, J., dissenting).

[22] The Court noted that "average unit costs are necessarily higher at the outset for any new entrant into virtually any business." *Third Report*

start-up costs or other impediments within the control of federal and state regulators to justify its conclusion competitors are, or could be, impaired without switching. The result is a framework that treats UNE-P as an unqualified good without sufficient regard for the costs associated with the Majority's forced sharing requirements.

Many factors cited by the Majority are cost disparities universally faced by any new market entrant. For example, the Majority explicitly finds that customer churn rates—a prime example of ordinary start-up costs—contributes to impairment.[23] Thus the Commission, once again, has relied upon factors specifically rejected by the *USTA* court. The Majority goes on to note that competitor switching architecture "effectively requires competitors to deploy much longer loops than the incumbent."[24] I do not contest the fact that competitors must reach their loops farther away from self-provisioned switches compared to incumbents who have deployed ubiquitous switching capability. What I do contest is the Majority's failure to adequately recognize that this network configuration demonstrates that competitors generate their own countervailing competitive *advantage* by self-provisioning switching.[25] While the cost of backhauling

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and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696, para. 7 (1999).

[23] Order para. 471 ("The record demonstrates that the current level of churn for carriers providing service to the mass market has significant negative revenue effects on the ability of competitive carriers to recover the high costs associated with manual hot cuts.").

[24] Order para 480. The majority describes the costs of backhaul, which "include the costs of collocating in the customer's serving wire center, installing equipment in the wire center in order to digitize, aggregate, and transmit the voice traffic, and paying the incumbent to transport the traffic to the competitors switch, put [competitors] at a significant cost disadvantage to the incumbent." Id. 480.

[25] *See* Separate Statement of Commissioner Michael K. Powell, Dissenting in part, CC Docket No. 96-98 (November 5, 1999).

traffic to a central switching point may or may not be marginally greater than the incumbent's cost of backhaul, competitors experience more advantageous cost conditions—including UNE transport rates—by avoiding the cost of deploying ubiquitous switching to every incumbent LEC wire center, thereby mitigating impairment.[26]

Reasonable minds could differ regarding the extent of this cost/benefit tradeoff but the law requires the Commission to confront this question in a serious manner that addresses both the benefits and social costs of unbundling—something the Majority has not done. Regrettably, given the porous nature of the switching triggers, there is simply no barrier that would preclude a state from using low retail rates or high startup costs as a way to ensure UNE-P will continue to be available. The Majority approach, in effect, begins with a default assumption of impairment. Only when all barriers to *profitability* have been eliminated does this Commission empower states to eliminate UNE-P.[27] This exercise is unlikely to achieve the balance called for explicitly by Justice Breyer in *Verizon* or "implicitly by the Court as a whole in its disparagement of the Commission's readiness to find 'any' cost disparity reason enough to order unbundling." *United States Telecom Ass'n, v. FCC, 290 F.3d 415, 428.*

The Commission's task is to determine whether competitors are impaired without a given "element." By directing states to examine factors that are chosen to focus on and overstate competitor cost disadvantages without

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[26] *See USTA* at 290 F.3d at 427 (faulting the Commission for failing to identify countervailing competitor economy of scale advantages in switching "over the entire extent of the market."). *See also id.* at 423 (faulting the Commission for failing to consider "the advantage CLECs enjoy in being free of any duty to provide underpriced service to rural and/or residential customers.").

[27] The Majority's comparison of costs and revenues amounts to a consideration of whether entry by a competitor is profitable. See Order paras. 517, 519-520.

meaningful consideration of countervailing advantages, the Commission has focused not on whether competitors are impaired without the switching *element* but, rather, the Majority has endorsed a regime that focuses on whether self-provided switching is as *profitable* as UNE-P. It is the Commission's job to ensure that local markets are open to competition and that competitors are given a fighting chance to participate in that market. By explicitly engaging in a profitability analysis, the Commission has converted the impairment standard into a protector of individual business plans.[28] In so doing, the Majority asks the wrong question and provides the wrong answer.

The Majority attempts to guide states' evaluation of switching impairment with a shot-gun blast of every imaginable economic criterion. In so doing, however, it revives the very type of factors explicitly rejected by the *USTA* court. It is said that the average cost of collocation, the cost of backhauling local traffic to a competitor's switch, the cost of capital and a competitor's back office expenses bear on a state's decision to find impairment.[29] These factors are problematic because they are almost identical to the factors rejected in the *UNE Remand* decision.[30] I am particularly

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[28] Order para. 517 n. 1579 (states may conduct "a business case analysis for an efficient entrant.").

[29] Order para. 520.

[30] The item's approach is virtually identical to the discredited "totality of the circumstances" test of the *UNE Remand Order*. *See* Order para. 458. Under the guise of granularity, it appears that the majority merely renamed the cost, quality, and ubiquity factors vacated by the D.C. Circuit by focusing the state analysis on precisely the alleged "impairments" analyzed by the Commission in the *UNE Remand* decision. *Compare UNE Remand Order* para. 263 (finding non-recurring costs of collocation constitutes impairment) *with Order* para. 520 (finding that states should consider whether non-recurring costs of collocation constitute impairment); *Compare UNE Remand Order* para. 266 (finding that loop cutovers costs constitute impairment) *with Order* para. 512

troubled that we are—once again—importing into the impairment analysis problems that do not result directly from denying competitors access to unbundled switching. To the extent collocation is a problem for competitors attempting to deploy their own switches, it is difficult to argue that this problem directly results from denying competitors access to unbundled switching.[31]

The Majority approach is more indefensible because through regulation we have addressed competitor collocation rights, and for the first time, solidified this area of competition policy with a judicial endorsement of their consistency with the Act.[32] Yet despite this success, the Majority would pervert these stable rules into sources of regulatory instability and impairment. Never mind that after this order, competitors will enjoy forward-looking prices for hot cuts, collocation and unbundled transport.[33] Never mind

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(finding that states should consider whether loop cutovers costs constitute impairment); *Compare UNE Remand Order* para. 256 (finding that geographic specific factors may determine impairment) *with Order* para. 520 (finding that states should consider whether geographic specific factors determine impairment); *Compare UNE Remand Order* para. 262 (finding that self-provisioning switching costs constitutes impairment) *with Order* para. 520 (finding that states should consider whether self-provisioning switching costs constitutes impairment).

[31] *See* Separate Statement of Commissioner Michael K. Powell, Dissenting in part, CC Docket No. 96-98 (November 5, 1999).

[32] Indeed the costs, delays, and physical constraints associated with collocation have already been addressed through the Commission's default provisioning interval. *See* Deployment of Wireline Services Offering Advanced Telecommunications Capability, *Fourth Report and Order*, CC Docket No. 98-147, 16 FCC Rcd 15435, 15454, para. 36 (2001) (Collocation Remand Order), *aff'd sub. nom. Verizon Telephone Cos. v. FCC*, 292 F.3d 903 (D.C. Cir. 2002).

[33] When geographic differences point to the elimination of an unbundling requirement, the Majority is all too happy to assume away these differences in favor of a national finding. *See* Order para. 470

that Congress provided a direct remedy for competitor collocation in section 251. Instead, somehow the super-efficient pricing of collocation, hot cuts and transport (which is set by regulators) has been twisted into a source of competitive disadvantage and possible reason to order forced sharing of the incumbent's switch. This bootstrapping flies in the face of the Court's admonition that factors set by regulators can hardly justify economic impairment.[34]

The Majority's bootstrapping of UNE rights further ignores the fact that the rates for collocation and hot cuts as well as other UNEs, are not within the control of the incumbent LEC and therefore are not cognizable under section 251(d)(2).[35] The Majority has threaded its impairment analysis with characteristics that are not linked to natural monopoly in direct contravention of the *USTA* decision. The state commissions are ultimately responsible for setting the rates for collocation and unbundled transport. State commissions are likewise responsible for setting retail local phone rates. We stray too far from a reasonable interpretation of section 251(d)(2) when we cite these government-controlled prices as the reason that private companies should be required to unbundled their networks. The Majority's approach risks the possibility that government will sponsor competition through indirect decisions and endorsement of continued implicit subsidies designed to prop up synthetic competition.

("Although hot cut costs vary among incumbent LECs, we find on a national level that these costs contribute to a significant barrier to entry.").

[34] Order para. 91 ("We examine those barriers to entry that are solely or primarily within the control of the incumbent LEC.") *See also USTA* at 427 (linking impairment to "natural monopoly" characteristics not conditions outside of control of incumbent LEC).

[35] Rather they are generally set according to state ratemaking authority found in section 252(d)(1)(A)(i). The statute does provide for interconnection agreements outside of the section 252 framework; but those arrangements are *bilateral* negotiations the terms of which are not entirely within the control of incumbent LECs.

When Congress adopted section 251(d)(2), it granted this Commission a toolbox to open local telephone markets to competition. One of those specific tools was unbundling. Unbundling is specifically designed to address impairments within the incumbent's control. The Majority's reliance on such things as collocation, CLEC-CLEC cross-connects, transport availability and retail rate structures is simply too far afield from the question of whether competitors are impaired without access to unbundled switching. I cannot support a decision to use the impairment standard as a hammer, a wrench, a screwdriver, etc., to fix every perceived problem that may ail rational competition in telecommunications markets.

I also have serious concerns that the Majority's switching approach is, in practice, unworkable.[36] The Majority's impairment model is dependent upon hundreds of assumptions about local exchange markets and costs. Simply by making different assumptions about local exchange networks, or by picking different input values for the costs, the Commission and implementing state commissions can reach widely varying conclusions, undermining a coherent

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[36] "Factor based" unbundling requirements have been tried by this Commission before, to little consistent effect. In the *UNE Remand Order*, the Commission created a straightforward 4-part test for unbundled packet switching. Despite this objective test, state commissions took diametrically opposed views of whether packet switching should be required. *Compare* Arbitration Award, Case No. 01-1319-TP-ARB, at 52 (Pub. Utils. Comm'n of Ohio, Nov. 7, 2002) ("the criteria" of the FCC's packet switching rule "should be evaluated on an RT-by-RT basis or location-by-location basis") *and* Final Order on Arbitration, Docket No. 010098-TP, order No. PSC-02-0765-FOF-TP, at 16 (Fla. Publ. Serv. Comm'n, June 5, 2002) (FCC's packet switching rule "contemplates a case-by-case analysis of whether [the four] conditions are met at specific remote terminals") *with* Order on Rehearing, Docket No. 00-0393, at 36 (Ill. Comm. Comm'n, Sept. 26, 2001 ("We reject Ameritech's notion that these situations must be viewed on an RT by RT basis.").

federal regime and distorting entry decisions.[37] This uncertain environment disadvantages competitors and incumbents alike as neither is in a position to make rational investment decisions based on stable rules.

Finally, even in circumstances where a state has found no mass market impairment, the Commission has seen fit to allow unbundling for three full years. Given the *USTA* court's emphasis on the significant social costs that unbundling imposes, it is legally problematic to require unbundled switching for *three years* when there has been an *express finding* of no impairment. I concede that the Commission is permitted to afford a reasonable transition to avoid undue customer disruption, but this period is nothing of the sort. Its true intent is made obvious by allowing unbundling clear through the Commission's next comprehensive unbundling review. This is not a decision that supports the transition to facilities-based networks; it is a decision that cleverly pushes UNE-P along until the next UNE review.

2. The Majority's Approach to Revenue Impairment is Inconsistent with the *USTA* Decision

Since we voted this item on February 20th, the Majority has attempted to harmonize the switching framework with other sections of the item. Turning heads to tails, the Majority now argues that dissenting criticisms of the switching approach rest on a mischaracterization of the *USTA* decision and are otherwise inconsistent with sections of the Order to which I have approved. This criticism boils down to a disagreement

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[37] The majority makes much of the fact that its approach responds to the *USTA* court's demand for granularity. Yet, in response to this decision, the states have already organized themselves into regional and national cooperatives that appear to be a far cry from the localized, market-specific findings the majority expected them to arrive at. *See* www.naruc.org/programs/trip/index.shtml.

over the manner in which the impairment standard is *applied*. For example, the Majority's switching decision conflates an impairment standard that properly asks whether entry is "uneconomic" with the question of whether entry is profitable.[38] Under its profitability analysis the Majority directs states to consider whether price and revenue *reductions* that result from additional competitive entrants can form the basis of impairment.[39]

First, I cannot agree that the very entry this Commission should rightly encourage can form the basis for a continuing impairment. This is a staggering endorsement of a centrally managed artificial competition standard that pays little attention to the positive consumer benefits that result from facilities-based competition. Second, I am at a loss to understand how a well-intentioned state commissioner can implement this decision. Is a 10 percent price reduction cause for impairment? 20 percent? It is quite simply an *ad hoc* calculation, permitting any result whatsoever. Third, this approach endorses a least common denominator circularity that is not faithful to the statute. If a first mover enters a market and is followed by a second entrant, can this be grounds to say that the third is impaired? The third entrant is not impaired, rather three is merely one too many for the market to sustain. Such regulatory calculus impedes the proper functioning of a market, which signals the right levels of scale and scope. The Majority's switching construct ignores the fundamentals of economics.

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[38] Order at para. 84.

[39] The Majority notes that "potential revenues could be outweighed by a combination of even higher economic and operational costs, such as untimely and unreliable provisioning of loops, transport, or collocation by the incumbent LEC at high non-recurring charges and significant costs to purchase equipment and backhaul the local traffic to the competitor's switch." Order para. 458.

Furthermore, it is widely accepted that because of universal service cross subsidies, many residential rates are priced below cost and, thus, the retail revenues associated with those services may, in some cases, not cover the costs incurred to provide the service. The D.C. Circuit, however, rejected the notion that competitors' decision not to enter subsidized markets with their own facilities demonstrates impairment.[40] In this situation, it is the retail rate structure that causes impairment, not the incumbent's monopoly position in the market. Thus, to the extent that the Majority's approach to revenue-impairment includes an analysis of artificially low retail voice rates, it is specifically barred by *USTA*.

B. The Majority Fails to Reach a Conclusive Finding of No-Impairment in Competitive Business Markets

In the business market, the Majority permits states to unbundle switching for business customers without a thorough analysis of sufficiently granular facts. As discussed above, my primary objection to the Commission's initial vote was the complete transfer of decision making authority to state commissions through a series of unreviewable presumptions of impairment.[41] I am pleased that in the

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[40] The D.C. Circuit stated that "[I]f competition performed with ubiquitously provided ILEC facilities counts, the more unbundling there is, the more competition," but then explained that if fact this competition does not support the goals of the Act because it is "completely synthetic." *USTA*, 290 F.3d at 422, 424.

[41] I appreciate the willingness of my colleagues to reform parts of their unbundling approach in response to my concerns at that time; but ultimately the Majority's approach has fallen short of the mark. On February 20, I dissented to the Majority's switching approach because unlike our impairment frameworks for transport and high-capacity loops, the Majority's switching decision made no findings at all and ensured that the transfer of ultimate decision making to the states was complete by withdrawing an appeal right to this Commission. Today the released version of the item does not use a pure presumptive approach but finds that the "hot cut" process currently inflicts a nationwide impairment on competitive LECs for mass market customers that only unbundled

released decision the Majority has jettisoned its initial presumptive approach to business switching.[42] In its place however, it has provided a procedural mechanism that provides for UNE-P in a segment of the market where facilities-based competitors have been the most successful. The record shows that more than 200 competitors have deployed more than 1,300 switches nationwide addressing 86 percent of Bell Operating company wire centers.[43] I am concerned that state decisions endorsing UNE-P, particularly to serve small enterprise customers, may devalue the assets of providers serving these markets and exert pressure on legitimate facilities-based providers to begin using UNE-P.

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switching cures. The Majority declares that "[o]ur national finding of impairment is based on the combined effect of all aspects of the hot cut process on competitors' ability to serve mass market voice customers." Order para. 473. In the business market, today's order adopts a national non-impairment finding, but provides a vehicle for state commissions to place switching on the list. I remain concerned that this approach renders the finding inconclusive and permits states to overturn the Commission's judgment.

[42] The Order's initial approach completely released its unbundling decision to the states without a right of appeal to this Commission, thereby "totally abdicat[ing] its ultimate responsibility for enforcing the [statutory] provision." *American Civil Liberties Union v. FCC*, 823 F.2d 1554, 1574-75 (D.C. Cir. 1987). Now the Majority relies on a state waiver process to protect against charges that it has avoided its responsibilities to determine which network elements should be unbundled.

[43] *See* BOC UNE Fact Report at I-9. The Majority's national business switching "findings" are presumptions by another name. Indeed the Majority notes that states may "rebut that finding based on a more granular inquiry." Order para. 451 n. 1375. In adopting this approach the Majority tests the limits of its authority and may well have, in effect, avoided the statutorily prescribed impairment test by means of a rebuttable presumption. The D.C. Circuit has explained that an "agency is not free to ignore statutory language by creating a presumption on grounds of policy to avoid the necessity for finding that which the legislature requires to be found." *United Scenic Artists, Local 829 v. NLRB*, 762 F.2d 1027 (D.C. Cir. 1987).

Instead of providing for a waiver process that allows states to unbundle UNE-P for business customers, I believe the record fully supports conclusively removing unbundled switching to serve business customers, subject to an appropriate transition to protect against customer disruption.

IV. The Majority Made Incongruous Compromises

I am concerned that there are incongruous compromises apparently designed only to preserve UNE-P. Take the Majority's decision on line sharing. Companies such as Covad presented specific, credible arguments that competitors are impaired without line sharing. The public statements of some of my colleagues make very clear that a majority of the Commission actually supported line sharing, yet it was sacrificed to secure votes to achieve the higher priority of indefinitely preserving UNE-P.[44] Courts have been quick to reverse agencies when they engage in "unprincipled compromises of Rube Goldberg complexity." *Schurz Communications Inc. v. Federal Communications Commission*, 982 F.2d 1043, 1050 (1992). With this in mind, we need to more fully explain the claim that competitors are not impaired without line sharing. One could have responsibly accepted or rejected Covad's arguments, but the claims should rise or fall on the merits. Here, members of the Commission seem to credit the merits, but nonetheless sacrificed parties who rely on line sharing in order to achieve something wholly unrelated and of little interest to companies like Covad.[45]

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[44] "I would have preferred to maintain this access, known as line sharing." Separate Statement of Commissioner Michael Copps, February 20, 2003. "There has been a great deal of comprise [sic] in this process. I am very comfortable with some of the decisions, while others quite frankly give me pause." Separate Statement of Commissioner Jonathan S. Adelstein, February 20, 2003.

[45] I expect that even this decision is cold comfort for providers who depend on line shared inputs to provide service. When the Commission voted on this item on February 20th, it was clear that it did not grandfather existing customers. Today, the Commission decides that carriers are

V. Conclusion

I believe this decision will prove too chaotic for an already fragile telecom market. In choosing to abdicate its responsibility to craft clear and sustainable rules on unbundling to the state commissions the Majority has brought forth a molten morass of regulatory activity that may very well wilt any lingering investment interest in the sector. And, I fear as much or more for competitors as I do incumbents, for the prolonged uncertainty of rights and responsibilities may prove stifling.

The nation will now embark on 51 major state proceedings to evaluate what elements will be unbundled and made available to competitors. These decisions will be litigated through 51 different federal district courts. These 51 cases will likely be decided in multiple ways—some upholding the state, some overturning the state and little chance of regulatory and legal harmony among them at the end of the day. These 51 district court cases are likely to be heard by 12 Federal Courts of Appeals—do we expect they will all rule similarly? If not, we will eventually be back in the Supreme Court of the United States to resolve any conflicts—the same Court that vacated our excessively permissive unbundling regime in 1999. This process will take many years and will hardly be the quieting and stabilizing regime that was so craved by a rocky market. It is, in short, a litigation bonanza.

This Majority's UNE-P decision could prove harmful to consumers in the long-run, and I cringe to see their welfare raised on the staff of the Majority's decision. Make no mistake, UNE-P may have very limited merits as a transitional strategy, but it is fatally flawed as sustainable

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impaired for grandfathered customers and orders continued access to line sharing. At the same time, however, the Majority concludes that this impairment mysteriously vanishes for new customers because of the presence of whole loop alternatives. The item does not explain why whole loop alternatives are not good enough for grandfathered customers.

local competition. This is not the low lying plateau on which the high aspirations of the 1996 Act should be planted. It is a model that only works if hundreds of stars align perfectly and stay that way: every state needs to continue to make every last element available; every decision to do so must be sustained by every court that examines it; the Commission must never tamper with it and Congress better not ever alter the rights. The regulatory arbitrage bubble expands ever more perilously with each regulatory variable and is sure to eventually pop, like dot coms of old, if government policy does not diligently steer the balloon to stable ground.

There are great strides being made today in the march of Digital Migration, which realize some of my most important objectives. I am disappointed, however, by today's decision on UNE-P. Nonetheless, it is the fair result of a democratic institution in which Majority rules. I also recognized that state commissions will now have an enormous task before them and I sincerely wish them the very best as they struggle through what the Commission could not. I pledge to work with them in partnership to yield the best result for the nation. And, I sincerely hope that those carriers who fought so fiercely for this result will now prove their value in the marketplace and actually deliver the local competition, lower prices and more innovative services that they insisted they would if they prevailed. I, for one, will be watching. This has been a tough proceeding, but I look forward to getting it behind us and moving to other matters pressing for the Commission's attention.

SEPARATE STATEMENT OF COMMISSIONER KATHLEEN Q. ABERNATHY APPROVING IN PART AND DISSENTING IN PART

Re: Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98 & 98-147, Report and Order and Further Notice of Proposed Rulemaking (rel. August 21, 2003).

The release of this Order and Further Notice concludes a long and difficult chapter in the Commission's review of its rules regarding unbundled network elements. As I explained upon adoption of the Order,[1] I strongly support the decision to create a national policy that exempts new broadband investment from unbundling at deeply discounted TELRIC rates. This bold action should restore incentives for carriers to build next-generation fiber-based networks that will support a host of exciting new broadband applications. I also support ensuring access to the bottleneck transport and loop elements that are critical to the continued development of facilities-based competition, and I am encouraged that my colleagues have unanimously supported my call to seek comment on proposed modifications of the pick-and-choose regime.

Nevertheless, I remain disappointed by the Commission's decision to perpetuate reliance on the unbundled network element platform (UNE platform or UNE-P) in the face of

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[1] Press Statement of Commissioner Kathleen Q. Abernathy, *Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; and Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 01-338, 96-98 & 98-147* (February 20, 2003).

widespread switch deployment by competitive LECs. While the majority has modified the unbundled switching framework since the February 20 decision, and I am gratified that their changes address some of my previously stated concerns, the majority's framework still falls short. The core flaw in the decision—its failure to impose meaningful limits on the availability of unbundled switching—unfortunately remains. Indeed, the majority's framework all but ensures that state commissions will preserve UNE-P in virtually all markets throughout the country for CLECs serving mass market customers. The Communications Act and the D.C. Circuit's *USTA* decision plainly preclude such an approach. Moreover, from a policy perspective, I would have placed greater faith in market forces and facilities-based competition where CLECs have deployed their own switches. Relying on state commissions to apply a convoluted regulatory framework inevitably will produce disparate results in similarly situated markets and will engender litigation in each and every state for years to come. I believe we should have brought far greater certainty to a turbulent market that craves it. I therefore dissent from the majority's treatment of unbundled switching.

I also dissent from the portion of the item concerning line sharing. The question of impairment regarding the high-frequency portion of the loop presents a close call on which reasonable minds can differ. But I cannot discern any lawful basis for grandfathering all existing line sharing arrangements. In light of the majority's determination that competitors are not impaired without access line sharing, the Commission plainly lacks authority to mandate unbundling indefinitely for existing customers.

I elaborate below on the two most pressing issues in this proceeding, broadband loops and unbundled switching, and I further explain my reasons for dissenting from the line sharing decision.

A. Broadband Loops

One of the 1996 Act's most important mandates, and accordingly one of my core goals as a Commissioner, is to facilitate the deployment of broadband infrastructure. The key question posed in this proceeding is *how* we should accomplish that end. The answer, in my view, is to remove regulatory obstacles to deployment and thereby ensure that network owners have adequate incentives to make the costly and risky investments needed to deliver broadband to all Americans.

The stakes in this debate could hardly be higher: While the FCC has been pondering the appropriate unbundling framework for broadband facilities, capital expenditures have fallen off a cliff. Carriers and equipment manufacturers alike have laid off thousands of workers, and bankruptcies have become commonplace. Despite our historical global leadership in communications technology and deployment, several other countries now surpass the United States in terms of broadband penetration and performance. American service providers and equipment vendors have been forced to slash research and development budgets and this trend is not easy to reverse.

Faced with this situation, the Commission is forced to balance two sometimes competing goals in the statute: preserving carriers' incentives to invest in new facilities, on the one hand, and providing competitive access to incumbents' networks, on the other. I believe that the balance we strike should vary both with the degree of new investment at issue and the bottleneck nature of the facility in question. At one end of the spectrum is fiber-to-the-home (FTTH) investment, which entails a complete replacement of legacy facilities (or entirely new construction in greenfield situations) and thus imposes immense costs and risks on incumbents as well as new entrants. The Order accordingly refrains from unbundling these new, non-bottleneck FTTH facilities. At the other end of the spectrum is existing copper

plant. Granting competitors access to copper loops or to the high-frequency portion of the loop (line sharing) in my view does not create any real disincentive to invest, because the loops in question already exist and the electronics used to provide line sharing already have been exempted from unbundling. As discussed below, I therefore believe that the majority should have preserved our line sharing requirements.

I am heartened by the Commission's decision to provide significant regulatory relief for new broadband investment. I firmly believe that this decision, in due time, will bring consumers the benefits of increased investment and innovation—which translates into better, faster, more robust services. I also believe that consumers will benefit from broadband competition—both intermodal (from cable modem, wireless, satellite, and powerline broadband providers) and intramodal (from competitive LECs using their own facilities and incumbents' loops and subloops). And because the telecom sector has become such an important driver of overall fiscal health, I expect that regulatory relief for broadband will serve as a much-needed stimulant to the economy.

B. Unbundled Switching (UNE-P)

While I enthusiastically support the decision to remove regulatory obstacles to broadband deployment, I remain opposed to the majority's resolution of the unbundled switching issue. As described in detail below, the majority seems intent on preserving UNE-P in virtually all markets throughout the country in spite of the widespread deployment of CLEC-owned switches in most areas.

As I indicated in February, I believe the statute does not permit this Commission to transfer ultimate decisionmaking authority to the state commissions. I thus dissented on the ground (among others) that, unlike our impairment frameworks for interoffice transport and high-capacity loops, which conclusively find an absence of impairment in markets

where a threshold number of competitors have deployed alternative facilities, the majority's decision on switching made no findings at all.[2] Throughout this proceeding, and in particular in my February 20 statement, I argued that there were a number of reasonable options proposed in the record, including pegging non-impairment findings to deployment of a threshold number of switches in a LATA (or other geographic area)—an approach backed by two respected former Chairpersons of NARUC's Telecommunications Committee.[3] The one thing I was not willing to do was transfer the ultimate decision on the presence of impairment to the state commissions.[4]

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[2] Rather, the majority merely adopted presumptions that gave state commissions virtually unfettered discretion to make impairment findings based on a myriad of factors. Particularly problematic was the majority's refusal to find non-impairment even where CLECs seek unbundled switching to serve enterprise customers at a DS-1 capacity and above; in spite of overwhelming record evidence demonstrating that dozens of CLECs serve such customers using self-provisioned switches, the majority was only willing to adopt a presumption of non-impairment, which states were free to overcome at their discretion. Aggrieved parties could not appeal state impairment findings to the Commission, ensuring that states would exercise the ultimate decisionmaking authority.

[3] *See* Joint Statement of Bob Rowe, Chairman, Montana Public Service Commission, and Joan Smith, Commissioner, Oregon Public Utility Commission (Jan. 30, 2003).

[4] As I explained in my statement accompanying the February 20 decision, the Commission plainly may not abdicate its statutory responsibility under section 251(d)(2) to determine which network elements shall be unbundled. As Justice Scalia explained for the Court in *Iowa Utilities Board*, "the question . . . is not whether the Federal Government has taken the regulation of local telecommunications competition away from the States. With regard to matters addressed by the 1996 Act, *it unquestionably has*." *AT&T v. Iowa Utils. Bd.*, 525 U.S. 366, 378 n.6 (1999) (emphasis added); *see also id.* (opining that the notion of "a federal program administered by 50 independent state agencies is surpassing strange"). Other courts also have made clear that the FCC may not thwart Congress's intention to create a federal scheme by surrendering its ultimate decisionmaking authority. *See, e.g., American Civil Liberties*

The released version of the majority's decision does not utilize a rebuttable presumption of non-impairment in the enterprise market, but instead makes a national finding of non-impairment. For mass market customers, the majority has found impairment on a national level and mirrored the consensus approach to transport and high-capacity loops by adopting federal triggers that (theoretically, at least) require states to make non-impairment findings in certain circumstances. As described below, however, the majority's framework still falls short in a number of respects.

The majority's revised impairment framework for unbundled switching used to serve mass market customers provides only illusory constraints. The majority's failure to account for the extensive deployment of circuit switches by CLECs and its failure to limit unbundling to situations where entry would be uneconomic in its absence flout the clear mandate of the D.C. Circuit in the *USTA* decision.[5]

In particular, the majority directs state commissions to find non-impairment where there are three competitor-owned switches deployed in a particular geographic area—*unless* those switches are being used only to serve enterprise customers.[6] This exception completely swallows the rule: While more than 200 competitors of all sizes have deployed circuit switches—totaling approximately 1,300 nation-

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Union v. FCC, 823 F.2d 1554, 1574-75 (D.C. Cir. 1987) (affirming that "the *ultimate* responsibility for ensuring a 'national policy' . . . lies with the federal agency responsible for administering the Communications Act" and upholding FCC rule at issue on ground that "the Commission has *not totally abdicated its ultimate responsibility* for enforcing the [statutory] provision," and thus did not thwart "Congress' efforts to establish a federal standard") (emphasis in original).

[5] *USTA v. FCC*, 290 F.3d 415, 425-28 (D.C. Cir. 2002).

[6] The majority also declares that state commissions must find a lack of impairment where there are two wholesale switching providers apart from the incumbent LEC, but the majority readily acknowledges that no wholesale switching market exists.

wide[7]—the majority declares that these simply do not count. The majority assumes away the existence of virtually all CLEC-owned switches because, with a limited number of exceptions, CLECs have chosen not to serve mass market customers using their own switches. The majority attempts to justify its exclusion of most existing circuit switches by characterizing them as "enterprise switches"—as if they were a different species of equipment. In actuality, the very same switches can be used to serve customers of all sizes and classes. The majority's assertion that CLECs cannot economically serve residential or small business customers using their own switches is unavailing for two principal reasons, even apart from the fact that some CLECs *are* in fact serving mass market customers on a UNE-L basis.[8]

First, the majority simply ignores the possibility—indeed, likelihood—that CLECs are generally refraining from using their own switches to serve mass market customers *because of the availability of UNE-P.* Why undertake the cost of connecting loops to your own switch if you can avoid investing any capital or taking any risk by purchasing the

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[7] Order at para. 436.

[8] *See BOC UNE Fact Report* at I-9, Figure 6-*Use of UNE Platforms by CLECs Providing Service to 25,000 or More Residential Lines Using Their Own Switches* ("CLECs providing service to 25,000 or more facilities-based residential lines include: ALLTEL, Broadview, Cavalier Telephone, Intermedia, Knology, McLeodUSA, RCN, TDS, TOTALink"); WorldCom Reply at 144 (stating the Cavalier is a "small competitive LEC experimenting with a UNE-L strategy"). *See also* Letter from Joseph O. Kahl, Director, Regulatory Affairs, RCN Telecom Services, Inc. to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Jan. 23, 2003); Letter from Mark Jenn, Manager-Federal Affairs, TDS Metrocom. to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (filed Oct. 24, 2002); Florida Digital Network February 2003, Presentation to the FCC, *in* Letter from Michael C. Sloan, Counsel to Florida Digital Network, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-338 (filed Feb. 6, 2003) (all describing UNE-L strategies).

entire platform at a superefficient TELRIC price?[9] Bootstrapping from the pervasive reliance on UNE-P to justify the continued availability of UNE-P is hardly the kind of rigorous impairment analysis required by Congress and the reviewing courts.

Second, the majority makes unwarranted assumptions about incumbent LECs' ability to connect loops to competitors' switches in a timely, reliable, and cost-effective manner. While incumbent LECs have submitted declarations attesting to their willingness and ability to handle any requested volume of hot cuts, the majority concludes that "it is *unlikely* that incumbent LECs will be able to provision hot cuts in sufficient volumes absent unbundled local switching in all markets."[10]

Such a predictive judgment *might* warrant deference if the Commission were writing on a blank slate, but we are not. In granting 37 section 271 applications by February 20 (now 43 applications), the Commission found time and again that the BOCs' hot cut processes are timely, cost-effective, and accurate.[11] The Commission cannot wipe these findings away

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[9] The majority has great faith that batch cut processes will induce UNE-P providers to transition voluntarily to a UNE-L model, but the record does not bear this out: Despite the availability of managed hot cut processes in some states, carriers with their own switches have been *increasing* their reliance on UNE-P. *See 2002 Local Competition Report* at Tables 3 & 5; *2000 Local Competition Report* at Table 5. That is hardly surprising given that UNE-P reduces costs to the level of a hypothetical, superefficient competitor; reduces risk; and eliminates the need to invest capital in new facilities.

[10] Order at para. 468 (emphasis added).

[11] *See, e.g., Joint Application by BellSouth Corp., BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Georgia and Louisiana*, CC Docket No. 02-35, 17 FCC Rcd 9018, 9146 (2002) (finding that BellSouth provisions hot cuts "in a timely manner and at an acceptable level of quality, with a minimal service disruption and a minimum number

by questioning whether the BOCs would be able to meet increased volumes in the absence of UNE-P. To the contrary, in evaluating the BOCs' operational support systems, the Commission affirmatively found that the BOCs "will be able to handle reasonably foreseeable demand volumes."[12] At a minimum, to avoid an arbitrary departure from Commission precedent, the majority should have presumed that the BOCs' hot cut processes are workable in states for which section 271 authority has been granted. In those states and others, it would have been perfectly appropriate to authorize state commissions to impose strict performance standards, and to require switch unbundling as a post-hoc remedial measure in the event of an ILEC's unsatisfactory performance. Indeed, I favored such an approach to avoid backsliding. But to assume failure at the outset and make a *nationwide* finding of

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of troubles"); *Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance, Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Texas*, CC Docket No. 00-65, 15 FCC Rcd 18354, 18486-95 (2000) (same); *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, CC Docket No. 99-295, 15 FCC Rcd 3953, 4104-4115 (1999) (same).

[12] *New York 271 Order*, 15 FCC Rcd at 3993 (setting standard that has been deemed satisfied in each section 271 approval order). The majority asserts that demand for unbundled loops in the absence of UNE-P could not have been reasonably foreseen at a time when many section 271 applications were granted as a result of UNE-P competition. Order at para. 469 n.1435. This assertion ignores the fact that UNE-P competition was practically non-existent in numerous states where section 271 applications were granted. More fundamentally, it is hard to fathom how the majority can square their assertion that increased volumes of hot cuts were unforeseeable with their characterization of UNE-P as a transitional mechanism designed to promote facilities-based competition. In other words, if we all agree that facilities-based competition has long been the Commission's goal (and in some cases is a reality already), then it is untenable to contend that increased volumes of hot cuts were not "reasonably foreseeable."

impairment—in the face of the Commission's repeated findings regarding the adequacy of BOC hot cut processes—is plainly unjustified. The Supreme Court has made clear that the burden of demonstrating impairment rests with the Commission;[13] we cannot mandate unbundling on the ground that that the BOCs have not yet *proven* non-impairment. In addition, since the Supreme Court has made clear that "[t]he Commission cannot, consistent with the statute, blind itself to the availability of elements outside the incumbent's network,"[14] the majority certainly cannot blind itself to the availability of the CLECs' own already-deployed switches.

Given the illusory nature of the switching triggers, as a practical matter, the only way a state can make a finding of non-impairment for CLECs serving mass market customers is if it finds that each and every one of a long list of potential entry barriers have been overcome (*see* Order at paras. 511-20). The majority states that, while CLEC switches that are serving enterprise customers cannot be counted for purposes of the "triggers," such deployment nevertheless should be given "substantial weight."[15] But this is mere lip service. The majority's multifactor test starts with a default presumption of impairment and cannot be overcome unless every conceivable obstacle to profitability has been eliminated. In this respect, it is essentially the same flawed framework that has been twice rejected by the reviewing courts.[16] This approach fails to heed the Supreme Court's mandate to avoid providing blanket access and instead impose a limiting standard rationally

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13 *Iowa Utils. Bd.*, 525 U.S. at 390-91.

14 *Id.* at 389.

15 Order at para. 508.

16 Indeed, the majority's "all relevant factors" approach, Order at para. 458, is essentially the same as the totality-of-the-circumstances approach in the *UNE Remand Order*, which was struck down in *USTA*.

related to the goals of the Act.[17] It even more starkly violates the D.C. Circuit's instruction that the Commission's impairment framework cannot be based on "an open-ended notion of . . . cost disparit[ies]."[18]

First, the majority directs states to consider "operational barriers" before making any finding of non-impairment. Specifically, a state would have to conclude that "the incumbent's facilities, human resources, and processes are sufficient to handle adequately the demand for loops, collocation, cross-connects, and other services required by competitors."[19] The majority fails to recognize, however, that remedies far less intrusive than unbundling—such as performance metrics tied to penalty payments for poor performance—have been found adequate (during the section 271 process and otherwise) to address such issues. Indeed, the costs, delays, and physical constraints associated with collocation[20] already have been addressed through rules adopted pursuant to section 251(c)(6). Perhaps state and federal regulators need to improve their oversight and enforcement, but any failings on regulators' part cannot be considered impairment.

Second, and just as problematically, the majority lists a number of "economic barriers" that also must be overcome to warrant a finding of non-impairment. The majority directs states to examine both revenues and costs in a manner that seems destined to perpetuate reliance on UNE-P. For example, states must consider the retail revenues a CLEC would earn from serving residential customers; presumably, if those revenues are low, that would warrant a continued finding of impairment. Here, again, the majority engages in

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17 *Iowa Utils. Bd.*, 525 U.S. at 388-90.

18 *USTA*, 290 F.3d at 426.

19 Order at para. 512.

20 *Id.* at para. 513.

bootstrapping, rather than an appropriately limited impairment analysis: If states have set residential rates artificially low, for example in rural areas, that would justify continued reliance on UNE-P under the majority's framework, even though the real barrier to competition is the retail rate structure (which states are free to change), as opposed to a natural monopoly cost. Thus, the majority still has failed to explain how "want of unbundling can be said to impair competition in such markets, where, given the ILECs' regulatory hobbling, any competition will be wholly artificial."[21]

On the cost side of the equation, the majority instructs state commissions to consider "the recurring and non-recurring charges paid to the incumbent LEC for loops, collocations, transport, hot cuts, OSS, signaling, and other services and equipment necessary to access the loop."[22] And, as if that were not enough, states also must somehow determine "an entrant's likely market share, the scale economies inherent to serving a wire center, and the line density of the wire center; . . . the impact of churn on the cost of customer acquisitions; the cost of maintenance, operations, and other administrative activities; and the competitors' capital costs."[23] Among other problems, the majority overlooks the fact that recurring and non-recurring charges for collocation, transport, hot cuts and the like are already set at TELRIC prices. Permitting findings of impairment based on such costs is another example of impermissible bootstrapping, given that these inputs are priced based on a hypothetical, forward-looking cost model that sets wholesale rates below the incumbent LEC's own embedded costs. In other words, unbundled transport, loops, and other UNEs are the *remedy*

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21 *USTA*, 290 F.3d at 422.

22 Order at para. 520.

23 *Id.*

for impairment, not a source of it.[24] Moreover, in telling states to consider whether "rolling UNE-P" can mitigate any impairment resulting from the above factors, the majority further violates *USTA*. If a competitor can quickly overcome a temporally limited startup disadvantage—such as a high churn rate experienced during the first few months of service—then the Commission should conclude that there is no impairment at all, given that new entrants in all industries typically must operate at a loss for an initial period.[25]

At bottom, the majority's open-ended framework does nothing to prevent state commissions from finding impairment based solely on their "belief in the beneficence of the widest unbundling possible."[26] A state need only cite low retail rates, or high startup costs, and it may preserve UNE-P forever, notwithstanding that numerous CLEC-owned switches may be available for use serving mass market customers. Thus, rather than narrowly employing switch unbundling to alleviate natural monopoly conditions, as the courts have instructed, the majority has told states they may treat switch unbundling as a cure-all. If the hot cut process is not functioning properly, despite the Commission's findings in the section 271 proceedings, they say: unbundle the switch. If transport costs are high, unbundle the switch. If collocation and cross-connect take months to provision, unbundle the switch. As we have been told in successive

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[24] I recognize that high backhaul costs and other expensive inputs do in fact make it difficult for CLECs to compete in rural areas, where retail rates are quite low, but, far from demonstrating impairment, this signals the need for rate rebalancing.

[25] *See USTA*, 290 F.3d at 427 ("To rely on cost disparities that are universal as between new entrants and incumbents in *any* industry is to invoke a concept too broad, even in support of an initial mandate, to be reasonably linked to the purpose of the Act's unbundling provisions.")

[26] *Id.*

decisions vacating our rules, the law does not permit such extensive and indiscriminate use of the unbundling remedy.[27]

C. Line Sharing

Finally, I also dissent from the majority's decision to eliminate line sharing. This is a close call, but, on balance, I believe that line sharing provides substantial procompetitive benefits without unduly constraining investment by incumbent LECs. Unlike the prospect of unbundling fiber-to-the-home loops or next-generation hybrid architectures, the record suggests that line sharing spurs ILEC investment in DSL, rather than retarding it. The reason is that, by definition, line sharing is available only over legacy copper loops—there is simply no loop upgrade that incumbents are deterred from making. Thus, as we weigh the goals of competitive access and promoting investment in new facilities, the balance favors reinstatement of a line-sharing obligation.

I am certainly mindful of the arguments against line sharing. For example, cable modem providers, rather than DSL providers, currently lead the broadband marketplace, making a line sharing obligation for LECs alone somewhat incongruous. Moreover, data LECs can obtain an entire unbundled loop and provide a combination of voice and data service, as the incumbent LECs do. Yet I believe that the record rebuts these arguments. Most importantly, the

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[27] In my February 20 press statement, I noted that the majority had abandoned the previous four-line limit that prevented competitors from purchasing unbundled switching to serve most business customers. The majority now announces that it is preserving that limit on an interim basis. Once that initial period ends, however, the majority will have expanded the potential availability of UNE-P to CLECs serving business customers with up to 20 lines. *See* Order at paras. 497, 525. As noted in my earlier statement, while justifying the status quo seems difficult enough, it is even harder to see how a potentially massive *expansion* of UNE-P, in the face of evidence that dozens of CLECs serve business customers of such size using their own switches, can possibly be squared with *USTA*.

presence of cable modem service in many (but not all) local markets does not seem sufficient to support a blanket finding of non-impairment for telecommunications carriers seeking to provide DSL service. I am also sympathetic to the argument that a carrier should not be forced to enter the voice telephony market simply to provide competitive DSL service. On balance, I cannot join the majority's decision to eliminate line sharing because the record demonstrates that line sharing promotes competition *and* investment. But the issue is, as noted, a close call, and I can appreciate the legal reasoning underlying the conclusion that carriers are not impaired without access to the high frequency portion of the loop (HFPL).

By contrast, I have significant concerns about the majority's post-adoption decision to grandfather existing customers indefinitely. In light of the majority's finding of non-impairment, and its resultant decision not to unbundle the HFPL, there is plainly no basis to require incumbent LECs to continue unbundling the HFPL indefinitely for existing customers. The majority attempts to couch this as a "transitional" mechanism, but these grandfathered customers are not being transitioned *to* any new carrier or arrangement. And the fact that the Commission will have an opportunity to revisit this decision during the next Biennial Review does not provide any certain end date. Rather, CLECs will continue to service such customers using the TELRIC-priced HFPL, notwithstanding the majority's unequivocal determination that the HFPL is no longer an unbundled network element under section 251(c)(3). This decision is inconsistent with the rule of law.

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In conclusion, the Order is a decidedly mixed result in my view. It scores a big win for consumers by promoting broadband investment, but it potentially undermines that victory by turning unbundled switching into a regulatory

morass that carriers will be stuck in for years to come. I therefore approve in part and dissent in part.

SEPARATE STATEMENT OF COMMISSIONER MICHAEL J. COPPS APPROVING IN PART, CONCURRING IN PART, DISSENTING IN PART

Re: Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers (CC Docket No. 01-338)

Seven years ago, Congress enacted a sweeping reform of our nation's telecommunications laws. In doing so, it sought to promote competition in all telecommunications markets and replace the heritage of monopoly with the vitality of competition. Provisions to open the local markets to competition are at the very heart of this Congressional framework. The Act contemplates three modes of competitive entry into the local market—construction of new networks, use of unbundled elements and resale of services. The competition envisioned in the legislation only now is becoming a reality. Today, because of the vision of Congress and the hard work of American entrepreneurs across the country, there are nearly 25 million competitive lines serving consumers. As the Commission's own data on local competition reflect, this number has continued to grow even during the economic downturn that the telecommunications industries and the nation as a whole have suffered. This proceeding offered us the opportunity to encourage this competition and fulfill the mandate of the law, which is "to secure lower prices and higher quality for American consumers."

In some ways, our action advances that mandate. We chart a course that preserves burgeoning voice competition in the local markets and steers it in the direction of further growth. We accord the states an enhanced role in making the granular determinations about where the rules of the game may need to be changed and where they should be maintained in order to

foster competition. In other equally important ways, however, we fail our charge. The majority decision plays fast and loose with the country's broadband future, denying it the competitive air it needs to breathe in order to flourish. Consumers, innovation and the Internet may well suffer.

This decision is not just a big-ticket item for telecommunications companies on one side or another of a set of complex and arcane issues. It affects us all. It is next month's telephone bill. It is also the next generation's broadband deployment. It is the future of the Internet. It will deeply affect our country's future.

As a result, this proceeding has been the subject of heated debate. Although our decision is plagued by shifting pluralities, I appreciate the willingness of my colleagues to engage in discussion to find common ground. In my own review I have tried always to keep in mind that setting competition policy is the exclusive jurisdiction of Congress. I have done my utmost to remain faithful to the public interest and to the competitive framework that Congress adopted in the 1996 Act. I believe those aspects of the decision I support and those I concur in are consistent with Congressional intent. Where I am unable to square a decision with statutory directives—no matter how hot the rhetoric—I am compelled to dissent.

I am pleased to support the rules we adopt to address the availability of local switching. In the face of intense pressure for the Commission to make broad nationwide findings on impairment—findings that would have doomed the future of unbundled elements such as switching—we have instead managed to fashion a majority for a more reasonable process to conduct a granular analysis that takes into account geographic and customer variation in different markets. In doing so, we are able to consider the very real differences in economies of scale involved in providing service to residential and small business customers on the one hand and larger business customers on the other. We also have

recognized that the states have a critical role to play in our unbundling determinations. The path to success is not through preemption of the role of the states, but through cooperation with the states. State commissions more proximate to and familiar with local markets are often best positioned to make the fact intensive determinations about impairments faced by competitors. I am therefore pleased with our decision that states should have an active role in conducting the granular analysis necessary to determine whether and where network elements such as switching should be available as unbundled network elements.

The decision regarding line sharing was a difficult one. I believe that line sharing has made a contribution to the competitive landscape. Had I the luxury of developing our list of unbundled network elements on a blank slate, I would have supported its inclusion. Our analysis in this decision, however, was etched against the very real background of the D.C. Circuit's decision *vacating* the Commission's line sharing rules. That decision and the record in this proceeding lead me to concur in this aspect of the Order. Circumscribed as we were here, my focus has been on providing a realistic transition and on developing carrier and consumer options. I am pleased that the decision provides an extended transition period to allow competitors to purchase the full loop facility as a network element. Carriers also may pair with competitive voice providers and collectively offer a full range of services to customers.

Critically, there are also parts of this Order with which I strongly disagree. Most importantly, I am troubled that we are undermining competition in the broadband market by limiting—on a nationwide basis in all markets for all customers—competitors' access to broadband loop facilities whenever an incumbent deploys a mixed fiber/copper loop. In essence, as incumbents deploy fiber anywhere in their loop plant, they are relieved of the unbundling obligations that Congress imposed to ensure adequate competition in the local

market. The majority assures us that by somehow ignoring the intent of Congress and tearing away the infrastructure that undergirds competition, this will promote investment in advanced architectures. Rather than "new wires, new rules," I fear the majority adopts a system of "no rules, old monopolies." This is not a brave new world of broadband, but simply the old system of local monopoly dressed up in a digital cloak.

The Commission has recognized time and again that loops are the ultimate bottleneck facility. Yet, here the Commission chooses to perpetuate the bottleneck, and it does so on a nationwide basis without adequate analysis of the impact on consumers, without analyzing different geographic or customer markets and without conducting the granular, fact-intensive inquiry demanded by the courts. I fail to see how the majority finds that competitors are impaired without access to the loop, but abandons this finding the minute that fiber is found in the loop architecture. To make matters even worse, in some markets such as the small business market, there may not be any competitive alternatives if competitors cannot get access to loop facilities. In other words, our nation's small businesses—the engines of so much entrepreneurial activity and economic growth—may be stuck without competitive choices and prices when it comes to critical broadband services. I fear this decision will result in higher prices for consumers and put us on the road to re-monopolization of the local broadband market.

As harmful as this decision is, it may not be the last battle this year in the headlong rush to deregulate broadband. Shortly, we may be considering whether to deregulate broadband entirely by removing core communications services from the statutory framework established by Congress. This strikes many, including me, as substituting our own judgment for that of the law. It is playing a game of regulatory musical chairs by moving technologies from one statutory definition to another. We will also consider whether

large incumbent carriers providing broadband services should henceforth be regulated as non-dominant or lacking market power, rather than dominant and exercising market power. And we commit in this Order to reviewing the Commission's forward-looking economic cost methodology for network elements in a soon-to-be-initiated proceeding that improperly crafted could create more problems than it resolves. In light of our goals of establishing certainty and stability, I hope we can agree to not use these other proceedings to overturn our new unbundling obligations over the next few short months. But I caution that it could indeed happen.

Finally, I am troubled by the less than satisfactory process that generated this decision. When Congress passed its landmark legislation seven years ago, the Commission generally implemented its regulatory directives in a bipartisan fashion by unanimous vote, reaching consensus under extremely short statutory deadlines. By contrast, this decision was adopted in a split fashion and based on a roughly conceived outline produced under the threat of a judicial deadline. I am disappointed that we were not able to reach compromise on all of the questions and issue a unanimous decision as previous Commissions were often able to accomplish. Perhaps, given the different philosophical and regulatory approaches which exist among us, that just was not in the cards here. Nevertheless, this proceeding and our recent decision on media concentration provide serious lessons about smoothing the process within, exchanging ideas and paper earlier on, and making sure we have enough time to reach and hammer out final agreements. I also believe that the constraints placed upon independent regulatory Commissioners by laws that forbid more than two of us from meeting together, talking together and reaching agreement together hobble the regulatory process and retard our ability to tackle complex proceedings like this one. I do not know of any other institution that is forced to operate in this fashion. Perhaps the ability to manage our discussions differently

would not have rescued this item—or others where the disagreement among my colleagues has been substantial—but I do think it could make a difference going forward. And we certainly have a lot of work to do going forward.

In light of the positive and negative parts of today's decision, I vote to approve in part, concur in part, and dissent in part. This has been a complex decision and a complex process. Nonetheless, I appreciate all the work that so many dedicated individuals at the Commission put in to ensure that this Order finally sees the light of day.

SEPARATE STATEMENT OF COMMISSIONER KEVIN J. MARTIN

Re: Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Report and Order on Remand and Further Notice of Proposed Rulemaking, CC Docket Nos. 01-338, 96-98, 98-147, 02-33

Today, the Commission finally releases the Triennial Review Order, which fully explains the decisions we made on February 20th. As I stated in my February 20th statement, this Order achieves a balanced approach that provides substantial regulatory relief for broadband investment, where there is vigorous competition, while preserving and facilitating competition for local residential service – the competition that has enabled millions of consumers to benefit from lower telephone rates. While I would have liked to release the Order sooner, I appreciate everyone on the Commission's desire to explain fully their views on these very important issues. My views are explained in my February 20th statement, which is attached.

NEWS

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This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action.
See MCI v. FCC. 515 F 2d 385 (D.C. Circ 1974).

FOR IMMEDIATE RELEASE
February 20, 2002

Contact: Emily Willeford
202-418-2100

COMMISSIONER KEVIN J. MARTIN'S PRESS STATEMENT ON THE TRIENNIAL REVIEW

I support this item because it achieves a principled, balanced approach. It ensures that we have competition and deregulation. We deregulate broadband, making it easier for companies to invest in new equipment and deploy the high-speed services that consumers desire. We preserve existing competition for local service—the competition that has enabled millions of consumers to benefit from lower telephone rates. And we continue the strong role of the states in promoting local competition and protecting consumers. Finally, we accomplish these goals in a manner that is consistent with the statute and the rulings of the courts.

Deregulating Broadband and Attracting New Investment

This Order takes important steps toward deregulating broadband and encouraging new investment. I have long believed that the Commission should make broadband its top priority and create proper incentives for new investment in advanced services. The action we take today provides sweeping regulatory relief for broadband and new investments. It removes unbundling requirements on all newly deployed fiber to the home. It provides regulatory relief for new hybrid fiber-copper facilities, while ensuring continued access to existing copper. And, it adjusts the "wholesale" prices for all new investment. In fact, we endorse and *adopt in total* the High Tech Broadband Coalition's proposals for the deregulation of fiber to the home and any fiber used with new packet technology.

Companies desiring to push fiber further to the home will now be able to make a fair return on their investment. And more consumers will be able to enjoy the fast speeds and exciting applications that a true broadband connection offers.

I hope this relief will jump start investment in next-generation networks and facilitate the deployment of advanced services to all consumers, including rural America. Our actions could then revitalize the advanced services market, leading to a new period of growth in telecommunications and most importantly manufacturing.

Preserving Local Competition

This Order also works to preserve local competition. The Telecommunications Act requires that competitors have access to pieces of the incumbents' networks when they are "impaired" in their ability to provide service. The Court of Appeals has made clear that in analyzing impairment, "uniform national rules" may be inappropriate. Rather, the Commission should take into account specific market conditions and look at specific geographic areas. Today's item follows these admonitions, putting in place a granular

analysis that recognizes that competitors face different operational and economic barriers in different markets. For example, the barriers competitors face in deploying equipment and trying to compete are different in Manhattan, Kansas than in Manhattan, New York.

Although some of my colleagues disagreed with certain aspects of this analysis, this disagreement primarily concerns the switching network element for residential customers, a small piece of the puzzle. We all agree that states should play a significant role in determining whether impairment exists for transport. We all agree that states should play a significant role in determining whether impairment exists for loop facilities. And, we all agree that incumbents should no longer be required to unbundle switching for business customers.

Some of my colleagues also wish to end the unbundling of all residential switching immediately. I believe such action would be inconsistent with recent court decisions and the state of competition in the market. It is true that there are now a significant number of residential telephone customers that receive service from a CLEC, but *the overwhelming majority of these customers is currently served through an incumbents' switch.* To declare an immediate end to the unbundling of all switching in every market in the country would ignore the Court's mandate for a more granular analysis and effectively end residential competition. Accordingly, I support the item's approach to treat residential switching as we do other network elements, removing unbundling obligations only after a fact specific market analysis.

Maintaining a Role for State Authorities

In establishing a market-specific impairment analysis for unbundling network elements, this item provides an important role for the states. During my time at the Commission, I have witnessed first hand the helpful role that the states have

played in our mutual goal of implementing the Telecommunications Act. I believe that the states are best positioned to make the highly fact intensive and local "impairment" determinations required by the Court of Appeals.

All of my colleagues agree with this principle when applied to the unbundling of transport and other network elements. Some felt, however, that we should not allow the states a role in determining the unbundling of switching. In my view, the item correctly treats switching as it does other network elements, recognizing that the states are better able to make individual, factual determinations about particular geographic markets than are federal regulators in Washington. And, just as we do for other network elements, the Commission provides the states detailed guidelines of what constitutes impairment. For example, we specifically require states to consider and resolve problems with provisioning—the so-called "hot cut" problem. We also require states to consider whether competitors have been successfully able to deploy their own switching facilities. We provide a roadmap for states to use in making their analysis, putting us on the road to facilities-based competition.

Conclusion

I believe we have crafted a balanced package of regulations to revitalize the industry by spurring investment in next generation broadband infrastructure while also maintaining access to the network elements necessary for new entrants to provide competitive services. This Order adopts clear rules and immediate regulatory relief for broadband deployment and new investment; it removes the obligation to unbundle switches for business customers immediately; and it provides a detailed roadmap for eliminating the remaining unbundling obligations for network elements.

I believe in limited government. I believe that competition—not regulation—is the best method of

delivering the benefits of choice, innovation, and affordability to consumers. The 1996 Act puts in place a policy that requires local markets be opened to competition first, and then provides for deregulation. I believe we have faithfully implemented this policy today. Where there is facilities-based competition, for example from cable modems n the broadband market or CLECs in the business market, we have provided deregulation. That is what the law and the courts require.

In sum, this Order achieves a balanced approach that provides regulatory relief for incumbents' new investment in advanced services while ensuring that local competitors will continue to have the access they need to provide service to consumers. I believe these steps will benefit consumers and the industry, and I support this Order.

- FCC -

Remarks by Commissioner Kevin J. Martin
20th Annual PLI/FCBA Telecom Conference
December 12, 2002
Washington, D.C.

"At the Crossroads"

Thank you, Dick, for that kind introduction. And thank you for inviting me to speak at this annual conference. The PLI and FCBA serve the communications bar so well with these informative sessions. I recall going to this one in particular as a junior associate, and I still remember how much I relied on the discussions and primers throughout much of the next year. I'm not sure that what I'll have to say today will be quite as educational as some of the speakers I heard then, but I hope at least to keep your attention. And perhaps I'll even spark a healthy debate.

I. DELIBERATION TO DECISION-MAKING

As most of you know, the Commission has spent almost a year collecting, reviewing, and discussing various policy proposals for local competition and broadband service. These issues are of critical importance, and certainly, a significant amount of time is needed to clearly think through the complicated legal and policy issues at stake.

At some point, however, the Commission must move to wrap up the debate and must start making the tough decisions. We must move from deliberation to decision-making.

I believe we now are at the crossroads where choices must be made. We have four critical rulemakings that have been pending since the beginning of the year: the Triennial Review of unbundled network elements, the dominant/nondominant proceeding, the wireline broadband NPRM, and the cable modem service NPRM. The records are complete, we have considered and debated the issues at length, and the proceedings are now ripe for action.

Moreover, industry conditions cry out for answers. Companies are struggling under too much debt, unable to recoup the past investments they have made. Markets are valuing companies at depressed levels, leaving companies with little capital. Carriers are postponing the purchase of the equipment necessary to deploy competitive local and advanced services, leaving the manufacturers to suffer the consequences.

As more manufacturers founder, we risk being left with too few domestic providers of critical infrastructure for advanced services, a significant threat to our national security. Finally, investors are questioning whether communications continues to be a profitable industry in which to risk capital.

I believe the prolonged uncertainty regarding such critical issues as local competition and broadband may have aggravated existing market troubles. Prolonged uncertainty can serve as a disincentive to invest in new and upgraded facilities, as a barrier to entry for potential competitors, and as a deterrent against modifying outdated business plans. Companies need to know the rules of the road, and they need to be able to rely on them.

It is time to eliminate uncertainty and instability. We must make the difficult policy choices and conclude these four proceedings. Our decisions are vital to industry, to national security, and to the consumers who ultimately will benefit from more competitive and advanced services.

Last May, I expressed my desire that the Commission take action on these pending proceedings by the end of year. Given the potential significance of our decisions on the economic conditions, I did not think that was an unreasonable goal. Indeed, last November the Commission committed to completing the Broadband proceedings by the end of this

year,[1] and the D.C. Circuit has expressed their expectation that we complete our Triennial Review this year, as well.[2] I am disappointed that we will not make it, but I am hopeful that we will act soon.

The Commission recently sought another extension of the D.C. Circuit's USTA decision mandate until February 20th, and I am beginning to become concerned with whether we will be able to make that deadline. If we are to meet that deadline, I believe we need to begin a more specific dialogue with the public, and with affected industries in particular, regarding the policy direction the FCC intends to take.

If I'm going to call for FCC action by the end of this year, however, I too must be prepared to share what I am thinking on these critical issues. Therefore, I offer the following thoughts in order to spur debate, respond to my own deadline, and to help the Commission finish its deliberative process and reach finality on these issues.

II. PRINCIPLES FOR DECISION-MAKING

I believe it is important for the Commission to begin with certain core values and goals. Once we have articulated and prioritized these principles, we can begin to evaluate concrete actions. Following are three principles that I believe should govern our decision making.

First, the Commission should make its top priority new investment and deployment of advanced network

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[1] *See Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Arkansas and Missouri*, CC Docket No. 01-194, Memorandum Opinion and Order, 16 FCC Rcd 20719 at 20754 (2001).

[2] *See United States Telecom Ass'n v. Federal Communications Commission*, 290 F.3d 415 (D.C. Cir. 2002).

infrastructure. We have a number of issues before us that are vital to the marketplace and need timely resolution. Nevertheless, we must begin somewhere. I believe the Commission should focus first on creating the right incentives for companies to invest in and deploy advanced services.

Until we create a stable regulatory framework for deploying and providing such services, our country's communications network and services will remain stagnant, not improving, not developing. The many people without access to advanced services now, particularly consumers in rural America, will remain without. And competition—the driver of innovation, growth, and effective pricing—will remain minimal.

Even if we correct the incentives with respect to the provision of basic telephony, and even if the market corrects its valuations of telecom carriers, companies will not invest in advanced services until we ensure that the governing regulations will not deprive companies of the ability to make a return on their investment.

Second, the Commission must minimize further questions and avoid creating greater uncertainty or prolonging ambiguity in this area. After having already taken a year to review a set of issues and debate various policy outcomes, we should resolve all of the issues, not just definitions, but also the implications on wholesale obligations. To put off the decisions that have the greatest impact on the marketplace to another day will only aggravate current market conditions and prolong the angst and uncertainty that surround the deployment of advanced services.

Third, the Commission must be responsive to the courts by outlining a clear standard on the necessary and impair test while remembering Congress's goal of ensuring that the local markets are truly open to competition. In so doing, we must address the court's criticism regarding our existing unbundling framework, while also ensuring access to essential facilities.

Priority I: A Regulatory Environment that Encourages New Investment

As you know, telecommunications has been responsible for much of this nation's economic growth during the past decade. The availability of advanced telecommunications is essential to the economy in the 21st century, dramatically reducing the costs of exchanging information, improving efficiency and productivity, and allowing previously local businesses to serve the world.

I am confident that spurring investment in the deployment of new facilities and advanced network infrastructure will lead to a new period of growth.

I believe that at the outset, there are three immediate steps the Commission can take to speed that growth and ensure that all Americans have greater access to advanced services.

1. Adjust TELRIC Pricing

First, we need to adjust the TELRIC pricing formula for all new investment on a going forward basis.

In my view, the TELRIC pricing formula provides incumbent service providers with an insufficient return on investment capital for new infrastructure.

In a nutshell, the existing TELRIC formula fails to accurately measure the true risk of capital investment under current economic conditions, and creates an unnecessary barrier for the deployment of broadband facilities.

We also need to adjust the depreciation schedules within the TELRIC formula to more adequately account for new investment. I believe that greater flexibility in depreciation time frames will provide a greater economic incentive for service providers to invest in and deploy new network infrastructure.

We therefore should conclude in the Triennial Review proceeding that we must adjust the TELRIC formula on a

going forward basis to spur deployment in new facilities and services.

1. Deregulate New "Fiber to the Home"

Secondly, I believe we also need to adopt the principles set forth in recent proposals regarding the regulatory framework for new fiber investment deployed to a customer premises.

Under these proposals, "fiber to the home" facilities would be relieved from unbundling requirements and incumbents would be relieved of any obligation to deploy copper facilities in new build situations where fiber to the home is deployed. Incumbents also would have several options and obligations with respect to the existing copper plant in new build situations.

In the recent DC Circuit decision overturning our unbundled network element regime, the Court criticized the Commission for not fully taking into account the ability of new entrants to invest in and deploy new network infrastructure. I believe that it is not "necessary" for a competitor to have access to a new fiber loop.

I believe that if incumbent service providers decide to build new fiber local loops to a customer premise, they should be free of "old-style" legacy rules. Legacy rules are ill-suited for new facilities and new services in the supercharged IP and fiber broadband worlds of tomorrow.

2. Provide Regulatory Relief for Hybrid Facilities but Ensure Continued Access

In my view, new entrants should only use incumbent facilities that are truly necessary for new entrants to provide service. That does not mean that we should allow incumbents to stop providing any elements overnight, and we need to acknowledge the distinctions among what different competitors may need to compete for small and medium-sized business or residential customers.

We also ought to reexamine how our unbundling and/or pricing rules apply to incumbent deployment of new facilities. For example, once we have determined that a particular state's market "is fully and irreversibly open to competition," how is access to yet-unbuilt new facilities at super efficient prices necessary to enable a new entrant to compete, especially if existing facilities or their equivalent capacity are maintained at current prices?

I must give Tom Tauke of Verizon credit for this policy construct. About a year and a half ago, shortly after I joined the Commission, I heard Tom give a speech where he laid out the concept of "new rules for new wires."

I believe that the Commission should freeze the service capacity level that must be made available on new or upgraded facilities to the service capacity level provided by the ILEC prior to the new investment in a hybrid facility. For example, under this approach competitors receiving access capacity at 1.54 mbs per second using pre-existing ILEC facilities would be able to continue to receive such access capacity at the same bit rate under newly deployed hybrid facilities.

I believe that incumbents should be given the proper incentives to push fiber deeper into their networks and closer to the American consumer. And such an approach actually facilitates the deployment of electronic loop provisioning which would solve many provisioning problems.

At the end of the day, ILECs should receive the benefits of making investments in new infrastructure deployment, but competitors should maintain the ability to receive access to end user customers at the service capacity levels that they currently receive.

Priority II: Minimize Further Questions and Uncertainty

These are turbulent economic times for the telecom industry and the economy as a whole. In such times, the

Commission should be particularly cognizant of the impact of its decisions and that it can contribute to market stability by establishing a more stable and reliable regulatory environment. Broad proceedings that remain pending for extended periods can contribute to uncertainty. Protracted uncertainty can prolong financial difficulties. Regulatory uncertainty and delay can function as entry barriers in and of themselves, limiting investment and impeding deployment of new services.

Particularly given the current financial conditions, we should act quickly on our major pending rulemakings, particularly as they relate to new investment. Prompt decision making will provide greater certainty and stability to the marketplace.

We should work to be faster and be more reliable in our decision making. Prolonged proceedings with shifting rules ultimately serve no one's interest, regardless of the substantive outcome. It is time for the Commission to take action not only on the UNE Triennial, but also on performance measures and the broadband proceedings.

Much of the buzz that I hear from others on the potential outcome for the Broadband proceeding is centered on deregulation of the retail offering of broadband service. My sense, however, is that the question that most parties want answered is how we will ultimately decide the wholesale or input question. In other words, I think most people already assume that we are going to treat Internet access as an information service. The question that matters is the regulatory treatment of DSL and cable modem transmission.

I recognize that the Commission itself may have contributed to the continuing confusion on this issue as a result of our ambiguous and somewhat contradictory statements in the Wireline Broadband Proceeding and the Cable Modem Proceeding. In both of these items we

attempted to address the appropriate regulatory framework for broadband services.

In the Cable Modem Proceeding,

(1) we determined that cable modem high speed Internet access is an information service;

(2) we decided that the Commission's Computer II unbundling obligations did not automatically apply to cable modem service; and

(3) we sought comment on whether some form of access obligations should ultimately be imposed on Cable Modem service.

In other words, in the Cable Modem Proceeding we addressed the definitional issue *and* left open the issue of whether we would impose discretionary unbundling obligations.

In the Wireline Broadband Proceeding, the Commission tentatively concluded that DSL high speed Internet access is an information service, and we asked about the implications of the Computer Inquiry II obligations and other unbundling obligations.

Some in and around the Commission have suggested that the Commission should use the same process we set forth in the Cable Modem proceeding in the Wireline Broadband proceeding.

In other words, they advocate that the Commission should address only the definitional issues and leave undecided—until some time later next year—whether and to what extent the unbundling obligations apply in the Wireline context.

I'm very concerned about—and at this stage I would not support—such an approach. We should be cognizant and clear on what the implications of that suggested approach would be.

In the Cable Modem proceeding, inaction resulted in no regulation being applied.

In the case of DSL, however, the impact of the current presumption under the Commission's decision is that unbundling obligations do apply.

Inaction by the Commission therefore leaves all of the unbundling regulations firmly in place—and only applies them to one of the two competitors.

Therefore, I see three potential courses of action:

We could treat DSL services similar to cable modem service.

In doing so, we would need to change our Computer II rules so that incumbent providers would no longer be required to provide underlying transmission services as retail service offerings. Providers nevertheless would have the incentive to provide broadband transport to unaffiliated ISPs on reasonable terms, because only by doing so could they maximize the value of their investments. Such offerings would be made available on a private carriage basis and not as unbundled tariffed offerings.

The Commission could, on an interim basis, guarantee ISPs access to broadband transmission services in a nondiscriminatory manner. Specifically, ILECs would be required to offer unaffiliated ISPs the same transmission services that the ILEC offers to its own affiliates through private carriage agreements. This nondiscrimination requirement could be put in place for two or three years, but then sunset unless the FCC extends it to all broadband providers.

Second, we could treat cable modem services similar to DSL services. Under this alternative, the Commission could leave the Computer Inquiry rules in place and apply them to all broadband providers with common carrier status. In effect, the FCC would impose the same regulatory framework

on cable modem service that currently applies to wireline DSL service.

As for the third option, I believe the only other logical alternative is to classify wireline broadband as a telecommunications service, with the accompanying nondiscrimination requirements, and to acknowledge that the Commission was wrong when it declared cable modem service to be an information service. Instead, the Commission could determine that cable modem service is a cable service subject to the panoply of Title VI regulations currently applicable to cable service providers, such as local franchise obligations and service regulations.

At this stage, of the three options I have just outlined, I believe the first option—treating DSL service similar to cable modem service—is the better choice. I recognize, however, that there are merits to all three—I fail to see any merits, however, in refusing to answer the underlying question.

Priority III: Responding to the Courts

As you know, the U.S. Court of Appeals for the DC Circuit has remanded the Commission's *UNE Remand Order*—the Commission's most recent effort to set out a list of network elements that incumbent local exchange carriers must make available on an unbundled basis to competing carriers.

The Court criticized the FCC's unbundling requirement as being overly broad. The Court found the FCC had failed to take into account the competitive nature of particular geographic and customer markets. At the end of the day, we need to develop an unbundling framework that can be implemented at a more granular level and takes into account the unique issues found in rural and underserved areas.

Provisioning Issues

First, as I have stated previously, in responding to the court, the Commission cannot ignore and must address provisioning and "Hot Cut" problems that new entrants have highlighted in

the record in order to ensure that impairment does not exist and to allow for access to the residential market.

Switching

I believe the Commission can adopt a relatively simple and straightforward test with regard to whether "unbundled local switching" is necessary for the provision of competitive services to consumers.

If other alternative facilities based providers exist in a market and the impairment associated with provisioning problems is addressed then switching would not need to be provided.

In other words, (1) alternative facilities providers would be required to use their own facilities, and (2) if a sufficient number of alternative providers are present, the Commission would assume that a wholesale market for switching is viable.

The unbundling obligations that reside in the Act, however, still remain viable and serve a pro-competitive purpose. In my view, the unbundling obligations are necessary and need to stay in place in those rural and underserved areas that lack alternative facilities based service providers.

At the end of the day, however, we need to recognize that if we fix existing provisioning problems that will allow competitors to easily migrate customers from the ILEC to their own facilities, then we cannot continue to require unbundling in markets where such competitive facilities exists.

Any shifts in regulatory direction, however, should be cushioned by transitional measures and safeguards.

Several states have requested that they become more involved in our impairment analysis.

In my view, much of the current talk about state preemption is premature. I believe that the States are best positioned to make those highly fact intensive and local determinations.

During my stay at the Commission, I have witnessed first hand the role that the States have played in being helpful partners in our mutual goal to implement the Act.

I believe that the States should be implementing our standard by making the factual determination regarding the existence of alternative facilities based providers and whether, and to what extent, impairment exists with respect to the ability of new entrants to access the market.

Line Sharing

Besides addressing our unbundling framework, the DC Circuit's USTA decision also vacated the Commission's Line Sharing Rules.

The Court stated that we failed to adequately take into account alternative facility providers, specifically cable and satellite. No one denies that Cable is the dominant provider of residential high speed Internet access services.

In my view, the Commission has no choice but to recognize this fact as it decides whether incumbent DSL providers should be treated as dominant carriers when they provide high speed Internet access services.

Therefore, I'm in favor of declaring the incumbents non-dominant in the residential high-speed Internet Access market and not re-imposing our Line Sharing obligations where a cable competitor exists for residential high speed services.

III. CONCLUSION

In sharing with you this afternoon my vision of how the Commission should proceed and what the future landscape should look like, I have covered a lot of ground. I'd like to leave you with some parting thoughts.

In today's marketplace, many residential consumers do have competitive, facilities-based choices for broadband services. Where a competing provider, such as cable, offers

broadband service, our regulations need to recognize this reality.

In the residential narrowband, or voice-centric world, however, less facilities-based competition exists. And our regulations also need to reflect that reality. That is why it is critical that we establish a framework, working with the States, that evaluates the true extent of facilities-based competition in markets throughout the country. We must not leave behind American consumers that live in rural and underserved areas.

I am optimistic that if the Commission follows the steps I have just outlined, we could develop a framework to encourage investment in new infrastructure and that would ensure the availability of next generation network technology for all consumers through out the nation.

By taking these steps, the Commission can establish a framework that would result in an effective tiered capacity approach agnostic to the nature of the service provider or the technology it is using, while still ensuring access to competitive providers for consumers. This framework puts cable operators and telephony providers on similar footing.

Both types of providers would have basic service obligations that remain regulated. Cable operators would be required to continue to offer basic cable; they would be subject to must carry obligations and basic tier pricing. Incumbent local exchange carriers would continue to be subject to unbundling and state supervision.

Access to capacity above that level, however, would be constrained primarily by market forces. Both types of service providers would be similarly situated with regard to how they provide broadband service. Both would be free to innovate, deploy additional capacity, and offer service in a completely unregulated tier.

As I have said, the Commission at some point must move from deliberation to decision-making. I believe we are now at the crossroads where the tough choices must be made. I recognize that I envision a very different world that exists today. The proposal I have set forth is provocative, and one with which everyone will not agree. Indeed, I will not be surprised if there are aspects with which you agree, but you do so silently, and points with which you disagree, and you do so loudly. But in the end, if the Commission is to move forward, we must engage more directly and specifically. I therefore welcome your reaction, criticism, and suggestions. Your move.

Thank you for your time.

SEPARATE STATEMENT OF COMMISSIONER JONATHAN S. ADELSTEIN APPROVING IN PART, CONCURRING IN PART, DISSENTING IN PART

Re: Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers (CC Docket 01-338).

As reflected by my vote on this Order—approving in part, concurring in part, and dissenting in part—this proceeding presented complex and difficult choices. Ultimately, I support much of this item because it is faithful to the Act, employs an instrumental partnership with our state commission colleagues, and preserves the burgeoning competition that so many inside and outside of this Commission have worked so hard to promote. Indeed, as we release this Order, most residential consumers are only now experiencing their first taste of competition for voice services, so I am pleased that the Order will allow consumers to continue enjoying these benefits. I write separately to explain further my support for much of this item and my significant concerns about other aspects.

As I said at the time we adopted this Order, our first and foremost role is to implement the law as written by Congress. We accomplish this goal by underpinning this Order with a vigorous "impairment standard"—the limiting principle which Congress set out to restrict the availability of unbundled elements. By applying this vigorous standard to the evidence before us, we respond to the concerns of our reviewing courts and ensure that our local competitions rules will be implemented as Congress intended.[1] On balance, I believe that most of the item applies this standard correctly, in accordance with the law and to the benefit of incumbents, competitors, and ultimately consumers.

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[1] *See AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 388 (1998).

Much of this item also appropriately balances the goals of promoting competition and creating the proper incentives for both incumbents and competitors to deploy their own facilities. Most notably, the switching and transport sections establish a framework that will allow nascent competition to continue to grow. At the same time, these sections provide a pathway for the elimination of unbundling obligations where carriers can either self-deploy facilities or obtain them from alternative sources, including other technology platforms.

With respect to the broadband portions of this Order, I have supported the item where possible but have significant concerns that the Order may raise significant barriers to both competition and the deployment of advanced services to residential and small business consumers. The deployment of broadband is crucial; it has the ability to bring unique benefits to the public and, indeed, to transform communities. So I support the Order's attempts to limit unbundling obligations in those cases where competitors and incumbents stand on equal footing. I must, however, dissent from other portions of the broadband section, in particular the so-called hybrid loops section. The Order's conclusions here are inconsistent with our stated goal of promoting facilities-based competition and may pose a real danger of denying consumers the benefits of competition for advanced services.

Switching Decision Preserves Voice Competition, Benefits Consumers, and is Faithful to the Act

In this Order, we have adopted rules to address the availability of local switching in a manner that is consistent with the Act and that preserves the benefits of competition for millions of American consumers. Despite considerable pressure from the voices of dissent, we cannot ignore the reality of how difficult it is for competitors to build out and connect their networks to residential and small business consumers.

Our framework will allow competition to continue to blossom in the voice market for residential and small business customers, in those circumstances where competitors have conclusively demonstrated that they are impaired without access to unbundled local switching.[2] The reality is that competition for residential customers has relied almost completely on the availability of unbundled local switching.[3] Our state commission colleagues have labored mightily to open markets to competition by ironing out performance issues, establishing incentive plans to ensure performance going-forward, and setting prices for network elements in accordance with this Commission's pricing rules. I am pleased that they will continue to play a role in developing local competition under our Order. Many of our own Section 271 approvals granting Bell Companies authorization to provide long distance service rely on the existence of UNE-Platform competition to meet the Track A requirements for facilities-based competition.[4] The service provided using incumbent's switching has brought the clearest and most direct benefits of competition to American consumers in the form of lower prices and innovative services. As many

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[2] Opponents of our decision invariably point to the current deployment switches by competitors. This argument, however, ignores critical differences in the mechanics and economics of providing service to residential and small business customers, as opposed to larger business customers.

[3] *Triennial Review Order*, para. 440 (noting that "much of the deployment relied upon by the BOCs in fact provides no evidence that competitors have successfully deployed switches as a means to access the incumbent's loops").

[4] *See* Letter from Brad E. Mutschelknaus, Counsel for Broadview Networks, to Marlene H. Dortch, Secretary, FCC (Jan. 21, 2003) (describing how all four RBOCs have relied upon the presence of UNE-P to advance their bids for section 271 authority).

consumer advocates told us, quite simply, it has brought the benefit of choice.[5]

Bringing the benefit of choice has been good for the American people and for American businesses. Companies are forging partnerships to offer bundled services that are attractive to consumers and can spur demand. Recently, AT&T Corporation announced that it had worked out a resale deal with its former subsidiary, AT&T Wireless Service, Inc., in which the two companies created an alliance to bring a wireline/wireless service offering. The availability of unbundled switching has allowed the nation's long distance carriers to provide bundled long distance and local services. The Bell Companies are following suit. They have begun rolling out programs that allow customers in some states to make unlimited local and national calls for one flat monthly rate. There is growth in these businesses, and it is made possible by technology and changing consumer habits. The companies providing these bundled packages are seeing them as a way to secure market share. I do not believe that these plans would have become so readily available if we had not preserved access to the UNE-Platform where competitors are unable to deploy their own facilities.

The switching rules adopted in this Order are solidly grounded in the Act and address the concerns of the reviewing courts, most notably the U.S. Court of Appeals for the District of Columbia in *USTA v. FCC*.[6] In response to that decision, our Order employs a more granular analysis that examines particular customer classes and geographic areas.

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[5] *See, e.g.* Letter from Robert S. Tongren, President, National Association of State Utility Consumer Advocates to Michael Powell, Chairman, FCC (Dec. 16, 2002); Letter from James Bradford Ramsey, General Counsel, NARUC, to Office of the Secretary, FCC (Feb. 14, 2003); Letter from Consumers Federation of America and Consumers Union to Michael Powell, Chairman, FCC (Feb. 13, 2003).

[6] *USTA v. FCC*, 290 F.3d 415 (D.C. Cir. 2002).

Using this analytical framework, unbundling will only be required in those areas where competitors are impaired. In addition, the Order applies an impairment standard that takes into account not only actual competitive deployment but the ability of competitors to self-deploy or obtain elements from alternative sources. The Order also takes into account the incentives created by unbundling rules. Indeed, we apply the same impairment standard that is endorsed by all five members of the Commission. Moreover, where we ask state commissions to analyze geographic and market-specific factors, we enumerate specific national triggers and criteria that are functionally identical to those endorsed by the full Commission in the transport section.

Finally, we have taken additional proactive steps to limit unbundling of the switching element. Where we determine there to be impairment without access to switching, we adopt mechanisms designed to mitigate impairment and thereby reduce the overall amount of unbundling.[7] For example, we include a baseline rolling use of unbundled switching for customer acquisition purposes. We have concluded that impairment in a given market can be mitigated by granting competitive carriers access to unbundled circuit switching for a temporary period during which it could accumulate customers and later migrate them through a batch hot-cut process to their own switching facilities. This temporary, rolling access can help address certain barriers to entry associated with the switching element. It can also help

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[7] First, we ask our state commission colleagues to evaluate whether competitors could rely on their own switches if they had access to a "batch hot cut" process that would enable them to transfer larger numbers of their customers over to their own switches. Such a process would minimize the costs and operational difficulties for competitors. Second, we ask our state commission colleagues to consider whether the use of unbundled switching on a "rolling" basis would cure whatever additional economic and operation barriers they determine to exist in discrete geographic markets.

address high customer churn, which some carriers say is as high as 50% for new customers during the first three months of service. This "rolling" availability of switching can aid competitors in their efforts to build up an adequate customer base and then cut over to the use of their own switches, facilitating the transition to facilities-based competitive service. This is about enhancing competitive entry and subsequent opportunity, and not hamstringing it before it is ripe. Indeed, the switching majority's decision takes critical steps to ensure that competitors do not rely on the UNE-Platform in perpetuity.

Overall, I am confident that this decision sets up a framework that responds to the D.C. Circuit and that will allow consumers to see lasting benefits of competition.

Broadband Decision Provides Inconsistent Incentives for Providers

As I have said before, speeding the deployment of broadband to all Americans is one of the most critical tasks before us. That is our clear mandate from Congress. So I support portions of the Unbundled Local Loops section of this Order that create appropriate incentives for competitors and incumbents to build out next generation facilities. I find, however, that the Order takes an uneven approach to creating incentives for broadband deployment and, accordingly, I must dissent from significant portions of the section.

I approve this Order's finding that incumbents and competitors stand on roughly equal footing when making new fiber-to-the-home deployments (*i.e.*, "greenfield" construction projects). Where barriers to deployment are equivalent, we should give providers every incentive to invest in and roll-out next generation facilities that will bring the benefit of advanced services to American consumers. Indeed, requiring unbundling in such circumstances would be the sort of overbroad approach for which this Commission has been rebuked in the past. By eliminating unbundling for greenfield

fiber-to-the-home projects, we will speed the deployment of these large information pipes, which have the greatest potential to deliver a wealth of innovative and beneficial services to consumers.

A more difficult choice was presented in the decision to eliminate the high frequency portion of the loop. Were I to look at this question without the overlay of existing judicial precedent, I would likely have reached a different outcome. Availability of this element has made a positive contribution to the competitive landscape by enabling competitors to provide advanced services through "line sharing" arrangements. Nevertheless, I concur in this section out of recognition that the *USTA* court has directly spoken to this issue[8] and with my expectation, which is being borne out in the current marketplace, that the ability of competitors to access whole loops will enable them to continue to roll-out broadband services to residential and small business consumers. Given the necessity of this action, I am pleased that we are able to provide a sufficient transition that will not disrupt service to the many consumers who currently receive broadband services *via* line sharing arrangements and that will allow competitors an opportunity to adjust their business plans to our new unbundling rules.

Regrettably, I cannot join the Order in other broadband findings. Portions of the Order disregard Congress' touchstone, the impairment standard. This is particularly so in those cases where incumbents are deploying fiber as part of their existing networks in the form of "hybrid loops," which combine copper and fiber plant. In these cases, I find the Order's conclusion that Section 706 of the Act outweighs the impairment standard of Section 251 to be unfounded. The decision to limit competitors' access to unbundled local loops, long recognized by this Commission and reviewing

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[8] *USTA v. FCC*, 290 F.3d at 428-430.

courts as the ultimate bottleneck facility,[9] strikes me as wholly inconsistent with the Commission's roundly-supported efforts to promote loop-based competition. More broadly, I fear that this decision may not only undermine competition but also drastically limit consumer choices for broadband, in many cases to one provider. Functionally, the Order forces many residential and small business consumers to choose narrowband, dial-up service in order to reap the benefits of competition.

Conclusion

While many, including me, would have preferred this Order to have been released on the day of adoption, the complex issues, the divergent viewpoints expressed, and the fact that significant portions of the drafting were not begun in earnest until after the vote prevented a simultaneous release. We have strived to finalize this Order as quickly as possible. In so doing, we faced the daunting task of addressing two court remands and the more than three thousand comments filed in this proceeding—many of which included sophisticated, and often contradictory, economic studies and analyses. The result is a five hundred page order that incorporates the views of different majorities to reach conclusions about particular elements. The complexity of the issues and the diversity of views may have slowed the process of finalizing the Order, but we have worked hard in fleshing out the final details of the Order to address many of the concerns raised by those in dissent. Of course, I would have preferred that this be a unanimous decision and I worked with both sides to try to find common ground. However, in the final tally, all five Commissioners agreed on an impairment standard that

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[9] *See Triennial Review Order*, para. 205 (noting that "[c]onstructing loop plant is both costly and time consuming, regardless of the type of loop being deployed"); Verizon v. FCC, 535 U.S. 467 at n.27 (acknowledging that loop facilities are "very expensive to duplicate").

satisfies the statute and the courts; we simply disagreed on how it is applied to the evidence for particular elements.

Throughout this process, we have been fortunate to have been aided by the exceptionally-talented and enormously-dedicated staff here at the Federal Communications Commission and to have had the benefit of a well-developed record reflecting the views of all types of service providers, equipment manufacturers, state utility commissioners, and, most importantly, consumer interests. While there are few who support every outcome in this item, I express my thanks to all of my colleagues, the dedicated staff, and the members of the communications industry and the public who contributed to this item.

APPENDIX C

FEDERAL STATUTES

47 U.S.C. § 153. Definitions

For the purposes of this chapter, unless the context otherwise requires—

* * * *

(29) Network element

The term "network element" means a facility or equipment used in the provision of a telecommunications service. Such term also includes features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.

* * * *

(43) Telecommunications

The term "telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

* * * *

(46) Telecommunications service

The term "telecommunications service" means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

* * * *

(June 19, 1934, c. 652, Title I, § 3, 48 Stat. 1065; May 20, 1937, c. 229, § 2, 50 Stat. 189; 1946 Proc. No. 2695, eff. July

4, 1946, 11 F.R. 7517, 60 Stat. 1352; July 16, 1952, c. 879, § 2, 66 Stat. 711; Apr. 27, 1954, c. 175, §§ 2, 3, 68 Stat. 64; Aug. 13, 1954, c. 729, § 3, 68 Stat. 707; Aug. 13, 1954, c. 735, § 1, 68 Stat. 729; Aug. 6, 1956, c. 973, § 3, 70 Stat. 1049; Aug. 13, 1965, Pub.L. 89-121, § 1, 79 Stat. 511; May 3, 1968, Pub.L. 90- 299, § 2, 82 Stat. 112; Sept. 13, 1982, Pub.L. 97-259, Title I, § 120(b), 96 Stat. 1097; Aug. 10, 1993, Pub.L. 103-66, Title VI, § 6002(b)(2)(B)(ii), 107 Stat. 396; Feb. 8, 1996, Pub.L. 104-104, § 3(a), (c), 110 Stat. 58, 61; Aug. 5, 1997, Pub.L. 105-33, Title III, § 3001(b), 111 Stat. 258.)

47 U.S.C. § 251. Interconnection

(a) General duty of telecommunications carriers

Each telecommunications carrier has the duty—

(1) to interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers; and

(2) not to install network features, functions, or capabilities that do not comply with the guidelines and standards established pursuant to section 255 or 256 of this title.

(b) Obligations of all local exchange carriers

Each local exchange carrier has the following duties:

(1) Resale

The duty not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services.

(2) Number portability

The duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission.

(3) Dialing parity

The duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service, and the duty to permit all such providers to have nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays.

(4) Access to rights-of-way

The duty to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms, and conditions that are consistent with section 224 of this title.

(5) Reciprocal compensation

The duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications.

(c) Additional obligations of incumbent local exchange carriers

In addition to the duties contained in subsection (b) of this section, each incumbent local exchange carrier has the following duties:

(1) Duty to negotiate

The duty to negotiate in good faith in accordance with section 252 of this title the particular terms and conditions of agreements to fulfill the duties described in paragraphs (1) through (5) of subsection (b) of this section and this subsection. The requesting telecommunications carrier also has the duty to negotiate in good faith the terms and conditions of such agreements.

(2) Interconnection

The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network—

(A) for the transmission and routing of telephone exchange service and exchange access;

(B) at any technically feasible point within the carrier's network;

(C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and

(D) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title.

(3) Unbundled access

The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

(4) Resale

The duty—

(A) to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers; and

(B) not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of such telecommunications service, except that a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers.

(5) Notice of changes

The duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

(6) Collocation

The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.

(d) Implementation

(1) In general

Within 6 months after February 8, 1996, the Commission shall complete all actions necessary to establish regulations to implement the requirements of this section.

(2) Access standards

In determining what network elements should be made available for purposes of subsection (c)(3) of this section, the Commission shall consider, at a minimum, whether—

(A) access to such network elements as are proprietary in nature is necessary; and

(B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

(3) Preservation of State access regulations

In prescribing and enforcing regulations to implement the requirements of this section, the Commission shall not preclude the enforcement of any regulation, order, or policy of a State commission that—

(A) establishes access and interconnection obligations of local exchange carriers;

(B) is consistent with the requirements of this section; and

(C) does not substantially prevent implementation of the requirements of this section and the purposes of this part.

(e) Numbering administration

(1) Commission authority and jurisdiction

The Commission shall create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis. The Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States. Nothing in this paragraph shall preclude the Commission from delegating to State commissions or other entities all or any portion of such jurisdiction.

(2) Costs

The cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission.

(3) Universal emergency telephone number

The Commission and any agency or entity to which the Commission has delegated authority under this subsection shall designate 9-1-1 as the universal emergency telephone number within the United States for reporting an emergency to appropriate authorities and requesting assistance. The designation shall apply to both wireline and wireless telephone service. In making the designation, the Commission (and any such agency or entity) shall provide appropriate transition periods for areas in which 9-1-1 is not in use as an emergency telephone number on October 26, 1999.

(f) Exemptions, suspensions, and modifications

(1) Exemption for certain rural telephone companies

(A) Exemption

Subsection (c) of this section shall not apply to a rural telephone company until (i) such company has received a bona fide request for interconnection, services, or network elements, and (ii) the State commission determines (under subparagraph (B)) that such request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof).

(B) State termination of exemption and implementation schedule

The party making a bona fide request of a rural telephone company for interconnection, services, or network elements shall submit a notice of its request to the State commission. The State commission shall conduct an inquiry for the purpose of determining whether to terminate the exemption under subparagraph (A). Within 120 days after the State commission receives notice of the request, the State commission shall terminate the exemption if the request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 of this title (other than subsections (b)(7) and (c)(1)(D) thereof). Upon termination of the exemption, a State commission shall establish an implementation schedule for compliance with the request that is consistent in time and manner with Commission regulations.

(C) Limitation on exemption

The exemption provided by this paragraph shall not apply with respect to a request under subsection (c)

of this section, from a cable operator providing video programming, and seeking to provide any telecommunications service, in the area in which the rural telephone company provides video programming. The limitation contained in this subparagraph shall not apply to a rural telephone company that is providing video programming on February 8, 1996.

(2) Suspensions and modifications for rural carriers

A local exchange carrier with fewer than 2 percent of the Nation's subscriber lines installed in the aggregate nationwide may petition a State commission for a suspension or modification of the application of a requirement or requirements of subsection (b) or (c) of this section to telephone exchange service facilities specified in such petition. The State commission shall grant such petition to the extent that, and for such duration as, the State commission determines that such suspension or modification—

(A) is necessary—

(i) to avoid a significant adverse economic impact on users of telecommunications services generally;

(ii) to avoid imposing a requirement that is unduly economically burdensome;

or

(iii) to avoid imposing a requirement that is technically infeasible; and

(B) is consistent with the public interest, convenience, and necessity.

The State commission shall act upon any petition filed under this paragraph within 180 days after receiving such petition. Pending such action, the

State commission may suspend enforcement of the requirement or requirements to which the petition applies with respect to the petitioning carrier or carriers.

(g) Continued enforcement of exchange access and interconnection requirements

On and after February 8, 1996, each local exchange carrier, to the extent that it provides wireline services, shall provide exchange access, information access, and exchange services for such access to interexchange carriers and information service providers in accordance with the same equal access and nondiscriminatory interconnection restrictions and obligations (including receipt of compensation) that apply to such carrier on the date immediately preceding February 8, 1996 under any court order, consent decree, or regulation, order, or policy of the Commission, until such restrictions and obligations are explicitly superseded by regulations prescribed by the Commission after February 8, 1996. During the period beginning on February 8, 1996 and until such restrictions and obligations are so superseded, such restrictions and obligations shall be enforceable in the same manner as regulations of the Commission.

(h) Definition of incumbent local exchange carrier

(1) Definition

For purposes of this section, the term 'incumbent local exchange carrier' means, with respect to an area, the local exchange carrier that—

(A) on February 8, 1996, provided telephone exchange service in such area; and

(B)(i) on February 8, 1996, was deemed to be a member of the exchange carrier association pursuant to section 69.601(b) of the Commission's regulations (47 C.F.R. 69.601(b)); or

(ii) is a person or entity that, on or after February 8, 1996, became a successor or assign of a member described in clause (i).

(2) Treatment of comparable carriers as incumbents

The Commission may, by rule, provide for the treatment of a local exchange carrier (or class or category thereof) as an incumbent local exchange carrier for purposes of this section if—

(A) such carrier occupies a position in the market for telephone exchange service within an area that is comparable to the position occupied by a carrier described in paragraph (1);

(B) such carrier has substantially replaced an incumbent local exchange carrier described in paragraph (1); and

(C) such treatment is consistent with the public interest, convenience, and necessity and the purposes of this section.

(i) Savings provision

Nothing in this section shall be construed to limit or otherwise affect the Commission's authority under section 201 of this title.

(June 19, 1934, c. 652, Title II, § 251, as added Feb. 8, 1996, Pub.L. 104- 104, Title I, § 101(a), 110 Stat. 61; Oct. 26, 1999, Pub.L. 106-81, § 3(a), 113 Stat. 1287.)

47 U.S.C. § 252. Procedures for negotiation, arbitration, and approval of agreements

(a) Agreements arrived at through negotiation

(1) Voluntary negotiations

Upon receiving a request for interconnection, services, or network elements pursuant to section 251 of this title,

an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251 of this title. The agreement shall include a detailed schedule of itemized charges for interconnection and each service or network element included in the agreement. The agreement, including any interconnection agreement negotiated before February 8, 1996, shall be submitted to the State commission under subsection (e) of this section.

(2) Mediation

Any party negotiating an agreement under this section may, at any point in the negotiation, ask a State commission to participate in the negotiation and to mediate any differences arising in the course of the negotiation.

(b) Agreements arrived at through compulsory arbitration

(1) Arbitration

During the period from the 135th to the 160th day (inclusive) after the date on which an incumbent local exchange carrier receives a request for negotiation under this section, the carrier or any other party to the negotiation may petition a State commission to arbitrate any open issues.

(2) Duty of petitioner

(A) A party that petitions a State commission under paragraph (1) shall, at the same time as it submits the petition, provide the State commission all relevant documentation concerning—

(i) the unresolved issues;

(ii) the position of each of the parties with respect to those issues; and

(iii) any other issue discussed and resolved by the parties.

(B) A party petitioning a State commission under paragraph (1) shall provide a copy of the petition and any documentation to the other party or parties not later than the day on which the State commission receives the petition.

(3) Opportunity to respond

A non-petitioning party to a negotiation under this section may respond to the other party's petition and provide such additional information as it wishes within 25 days after the State commission receives the petition.

(4) Action by State commission

(A) The State commission shall limit its consideration of any petition under paragraph (1) (and any response thereto) to the issues set forth in the petition and in the response, if any, filed under paragraph (3).

(B) The State commission may require the petitioning party and the responding party to provide such information as may be necessary for the State commission to reach a decision on the unresolved issues. If any party refuses or fails unreasonably to respond on a timely basis to any reasonable request from the State commission, then the State commission may proceed on the basis of the best information available to it from whatever source derived.

(C) The State commission shall resolve each issue set forth in the petition and the response, if any, by imposing appropriate conditions as required to implement subsection (c) of this section upon the parties to the agreement, and shall conclude the resolution of any unresolved issues not later than 9

months after the date on which the local exchange carrier received the request under this section.

(5) Refusal to negotiate

The refusal of any other party to the negotiation to participate further in the negotiations, to cooperate with the State commission in carrying out its function as an arbitrator, or to continue to negotiate in good faith in the presence, or with the assistance, of the State commission shall be considered a failure to negotiate in good faith.

(c) Standards for arbitration

In resolving by arbitration under subsection (b) of this section any open issues and imposing conditions upon the parties to the agreement, a State commission shall—

(1) ensure that such resolution and conditions meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title;

(2) establish any rates for interconnection, services, or network elements according to subsection (d) of this section; and

(3) provide a schedule for implementation of the terms and conditions by the parties to the agreement.

(d) Pricing standards

(1) Interconnection and network element charges

Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251 of this title, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section—

(A) shall be—

(i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and

(ii) nondiscriminatory, and

(B) may include a reasonable profit.

(2) Charges for transport and termination of traffic

(A) In general

For the purposes of compliance by an incumbent local exchange carrier with section 251(b)(5) of this title, a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless—

(i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and

(ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

(B) Rules of construction

This paragraph shall not be construed—

(i) to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements); or

(ii) to authorize the Commission or any State commission to engage in any rate regulation

proceeding to establish with particularity the additional costs of transporting or terminating calls, or to require carriers to maintain records with respect to the additional costs of such calls.

(3) Wholesale prices for telecommunications services

For the purposes of section 251(c)(4) of this title, a State commission shall determine wholesale rates on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier.

(e) Approval by State commission

(1) Approval required

Any interconnection agreement adopted by negotiation or arbitration shall be submitted for approval to the State commission. A State commission to which an agreement is submitted shall approve or reject the agreement, with written findings as to any deficiencies.

(2) Grounds for rejection

The State commission may only reject

(A) an agreement (or any portion thereof) adopted by negotiation under subsection (a) of this section if it finds that—

(i) the agreement (or portion thereof) discriminates against a telecommunications carrier not a party to the agreement; or

(ii) the implementation of such agreement or portion is not consistent with the public interest, convenience, and necessity; or

(B) an agreement (or any portion thereof) adopted by arbitration under subsection (b) of this section if

it finds that the agreement does not meet the requirements of section 251 of this title, including the regulations prescribed by the Commission pursuant to section 251 of this title, or the standards set forth in subsection (d) of this section.

(3) Preservation of authority

Notwithstanding paragraph (2), but subject to section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of an agreement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(4) Schedule for decision

If the State commission does not act to approve or reject the agreement within 90 days after submission by the parties of an agreement adopted by negotiation under subsection (a) of this section, or within 30 days after submission by the parties of an agreement adopted by arbitration under subsection (b) of this section, the agreement shall be deemed approved. No State court shall have jurisdiction to review the action of a State commission in approving or rejecting an agreement under this section.

(5) Commission to act if State will not act

If a State commission fails to act to carry out its responsibility under this section in any proceeding or other matter under this section, then the Commission shall issue an order preempting the State commission's jurisdiction of that proceeding or matter within 90 days after being notified (or taking notice) of such failure, and shall assume the responsibility of the State commission under this section with respect to the proceeding or matter and act for the State commission.

(6) Review of State commission actions

In a case in which a State fails to act as described in paragraph (5), the proceeding by the Commission under such paragraph and any judicial review of the Commission's actions shall be the exclusive remedies for a State commission's failure to act. In any case in which a State commission makes a determination under this section, any party aggrieved by such determination may bring an action in an appropriate Federal district court to determine whether the agreement or statement meets the requirements of section 251 of this title and this section.

(f) Statements of generally available terms

(1) In general

A Bell operating company may prepare and file with a State commission a statement of the terms and conditions that such company generally offers within that State to comply with the requirements of section 251 of this title and the regulations thereunder and the standards applicable under this section.

(2) State commission review

A State commission may not approve such statement unless such statement complies with subsection (d) of this section and section 251 of this title and the regulations thereunder. Except as provided in section 253 of this title, nothing in this section shall prohibit a State commission from establishing or enforcing other requirements of State law in its review of such statement, including requiring compliance with intrastate telecommunications service quality standards or requirements.

(3) Schedule for review

The State commission to which a statement is submitted shall, not later than 60 days after the date of such submission—

(A) complete the review of such statement under paragraph (2) (including any reconsideration thereof), unless the submitting carrier agrees to an extension of the period for such review; or

(B) permit such statement to take effect.

(4) Authority to continue review

Paragraph (3) shall not preclude the State commission from continuing to review a statement that has been permitted to take effect under subparagraph (B) of such paragraph or from approving or disapproving such statement under paragraph (2).

(5) Duty to negotiate not affected

The submission or approval of a statement under this subsection shall not relieve a Bell operating company of its duty to negotiate the terms and conditions of an agreement under section 251 of this title.

(g) Consolidation of State proceedings

Where not inconsistent with the requirements of this chapter, a State commission may, to the extent practical, consolidate proceedings under sections 214(e), 251(f), 253 of this title, and this section in order to reduce administrative burdens on telecommunications carriers, other parties to the proceedings, and the State commission in carrying out its responsibilities under this chapter.

(h) Filing required

A State commission shall make a copy of each agreement approved under subsection (e) of this section and each statement approved under subsection (f) of this section

available for public inspection and copying within 10 days after the agreement or statement is approved. The State commission may charge a reasonable and nondiscriminatory fee to the parties to the agreement or to the party filing the statement to cover the costs of approving and filing such agreement or statement.

(i) Availability to other telecommunications carriers

A local exchange carrier shall make available any interconnection, service, or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement.

(j) "Incumbent local exchange carrier" defined

For purposes of this section, the term "incumbent local exchange carrier" has the meaning provided in section 251(h) of this title.

(June 19, 1934, c. 652, Title II, § 252, as added Feb. 8, 1996, Pub.L. 104- 104, Title I, § 101(a), 110 Stat. 66.)

47 U.S.C. § 253. Removal of barriers to entry

(a) In general

No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

(b) State regulatory authority

Nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis and consistent with section 254 of this title, requirements necessary to preserve and advance universal service, protect the public safety and

welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers.

(c) State and local government authority

Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.

(d) Preemption

If, after notice and an opportunity for public comment, the Commission determines that a State or local government has permitted or imposed any statute, regulation, or legal requirement that violates subsection (a) or (b) of this section, the Commission shall preempt the enforcement of such statute, regulation, or legal requirement to the extent necessary to correct such violation or inconsistency.

(e) Commercial mobile service providers

Nothing in this section shall affect the application of section 332(c)(3) of this title to commercial mobile service providers.

(f) Rural markets

It shall not be a violation of this section for a State to require a telecommunications carrier that seeks to provide telephone exchange service or exchange access in a service area served by a rural telephone company to meet the requirements in section 214(e)(1) of this title for designation as an eligible telecommunications carrier for that area before being permitted to provide such service. This subsection shall not apply—

(1) to a service area served by a rural telephone company that has obtained an exemption, suspension, or modification of section 251(c)(4) of this title that

effectively prevents a competitor from meeting the requirements of section 214(e)(1) of this title; and

(2) to a provider of commercial mobile services.

(June 19, 1934, c. 652, Title II, § 253, as added Feb. 8, 1996, Pub.L. 104- 104, Title I, § 101(a), 110 Stat. 70.)

47 U.S. C. § 261. Effect on other requirements

(a) Commission regulations

Nothing in this part shall be construed to prohibit the Commission from enforcing regulations prescribed prior to February 8, 1996, in fulfilling the requirements of this part, to the extent that such regulations are not inconsistent with the provisions of this part.

(b) Existing State regulations

Nothing in this part shall be construed to prohibit any State commission from enforcing regulations prescribed prior to February 8, 1996, or from prescribing regulations after February 8, 1996, in fulfilling the requirements of this part, if such regulations are not inconsistent with the provisions of this part.

(c) Additional State requirements

Nothing in this part precludes a State from imposing requirements on a telecommunications carrier for intrastate services that are necessary to further competition in the provision of telephone exchange service or exchange access, as long as the State's requirements are not inconsistent with this part or the Commission's regulations to implement this part.

(June 19, 1934, c. 652, Title II, § 261, as added Feb. 8, 1996, Pub.L. 104- 104, Title I, § 101(a), 110 Stat. 79.)

Telecommunications Act of 1986, Pub. L. No. 104-104, 110 Stat. 56, 153

* * * *

SEC. 706 Advanced Telecommunications Incentives

(a) In general.—The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.

(b) Inquiry.—The Commission shall, within 30 months after the date of enactment of this Act, and regularly thereafter, initiate a notice of inquiry concerning the availability of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) and shall complete the inquiry within 180 days after its initiation. In the inquiry, the Commission shall determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion. If the Commission's determination is negative, it shall take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.

(c) Definitions.—For purposes of this subsection:

> (1) Advanced telecommunications capability.—The term "advanced telecommunications capability" is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications

capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.

(2) Elementary and secondary schools.—The term "elementary and secondary schools" means elementary and secondary schools, as defined in section 14101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8801).

APPENDIX D

The following were parties to the District of Columbia Circuit proceedings below.

AT&T Corp.

AT&T Wireless Services, Inc.

Allegiance Telecom, Inc.

Arizona Corporation Commission

Association of Communications Enterprises

Association for Local Telecommunications Services

Allegiance Telecom, Inc.

BellSouth Corporation

Birch Telecom, Inc.

BridgeCom International, Inc.

CIMCO Communications, Inc.

Catena Networks, Inc.

Cbeyond Communications, LLC

CO Space Services, LLC

Competitive Telecommunications Association/ASCENT Alliance

Conversent Communications, LLC

Covad Communications Company

Data Net Systems, LLC

EarthLink, Inc.

Eschelon Telecom, Inc.

El Paso Networks, LLC f/k/a El Paso Global Networks

Federal Communications Commisssion

Focal Communications Corporation

General Communication, Inc.

ICG Communications, Inc.

InfoHighway Communications Group

Information Technology Association of America

KMC Telecom III, LLC f/k/a KMC Telecom, Inc.

LDMI Telecommunications, Inc.

Manhattan Telecommunications Corporation d/b/a Metropolitan Telecommunications

McLeodUSA Telecommunications Services, Inc.

Michigan Public Service Commission

Mpower Communications Corporation

National Association of Regulatory Utility Commissioners

National Association of State Utility Consumer Advocates

National Telecommunications Cooperative Association

Network Access Solutions Corporation

Network Access Solutions, Inc.

New York Public Service Commission

NewSouth Communications Corporation

Nextel Communications, Inc.

NuVox, Inc.

Pennsylvania Public Utility Commission

People of the State of California and Public Utilities Commission of the State of California

People of the State of New York and Public Service Commission of the State of New York

Promoting Active Competition Everywhere ("PACE") Coalition

Qwest Communications International Inc.

Qwest Corporation

RCN Telecom Services, Inc.

Rhythms NetConnections, Inc.

Sage Telecom, Inc.

SBC Communications Inc.

SNiP LiNK, LLC

Sprint Corporation

T-Mobile USA, Inc.

TDS Metrocom, LLC

Talk America Inc.

Telecommunications Resellers Association

United States of America

United States Telecom Association

VeriSign Communications Services f/k/a Illuminet

Verizon Telephone Companies

WorldCom, Inc. (MCI)

XO Communications, Inc.

Xspedius Communications, LLC

Z-Tel Communications, Inc.